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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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JANUARY 1962

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

JANUARY 1962 Nav-Pers-O NUMBER 540

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, **Editor**
John A. Oudine, **Managing Editor**

Associate Editors
G. Vern Blasdell, **News**
Jerry Wolff, **Research**
Don Addor, **Layout & Art**
French Crawford Smith, **Reserve**

• AT LEFT: LOTS OF FLATTOP — Photo of the new carrier USS *Constellation* (CVA 64), cruising up the East River past New York skyline, gives a good size comparison between floating 'air station' and buildings.

FRONT COVER: WINTER MASQUERADE — Photographer W. A. Jockman, PHC, USN, decked out with protective clothing, including face mask, moves out to record the fury of an Antarctic snowstorm while wintering-over at NAF McMurdo Sound.

• CREDIT: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

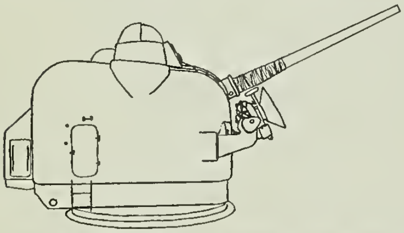
POINTERS OF RECOGNITION

Do You Know Your Ship

JUST FOR FUN, many of us can recognize the make of almost any automobile on the road, and in quite a few cases even tell the year it was built. We can also usually identify a foreign automobile and name the country in which it was built.

How do we do this? Easy. We look at the body style, the grill, tail lights, and maybe the headlights and relate these features to the total form. Most of the time this tells us everything we need to know about the car.

But what about ships? We live in them, they are our homes, our transportation and our protection, yet as a general rule, we are far less familiar with ships than we are with automobiles. However, experts use the same method to identify ships that we do automobiles.



New Box Type Dual-Purpose Gun Mount

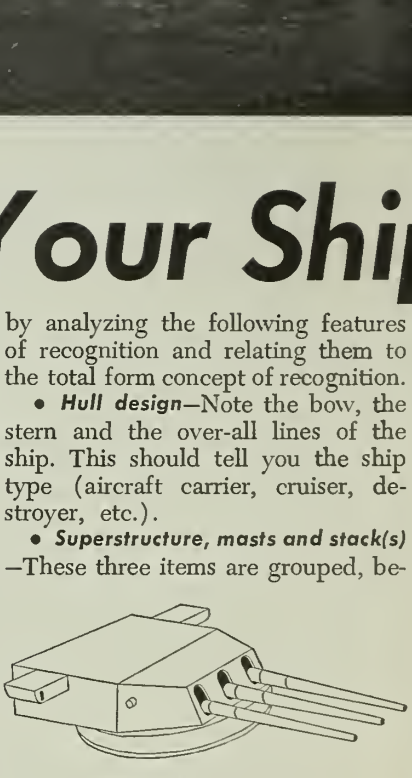
Rather than body style, the ship experts look at hull configuration. Instead of the type of roof, fenders and over-all body shape of an automobile, they look for the shape of the bow and stern, and the size, shape and placement of superstructure. They also look at the placement and number of stacks, number and placement of main batteries and the type of masts and where they are located relative to other points of recognition. In other words, they look for features of a ship, like those of an automobile, which are not easily altered. These features, when combined, provide the over-all total form concept essential to snap recognition.

AN EXAMPLE of what poor recognition can do to a battle plan happened early in World War II. In the Battle of the Coral Sea, Japanese scout plane pilots identified the oiler USS *Neosho* (AO 23) as a carrier. As a result, Japanese attack planes were led away from our real carriers at a critical point in the battle. In the same battle some of the Japanese pilots even mistook American carriers for their own and attempted to land on board.

In this battle, two Japanese carriers were mauled so badly that they were unable to take part in the following Battle of Midway. Thus one recognition mistake may have caused two Japanese defeats.

Even today your life may depend on your ability to recognize ships of the U. S. Navy and other navies. If you aren't already an expert, we suggest you learn to identify ships by analyzing the following features of recognition and relating them to the total form concept of recognition.

- ***Hull design***—Note the bow, the stern and the over-all lines of the ship. This should tell you the ship type (aircraft carrier, cruiser, destroyer, etc.).
- ***Superstructure, masts and stack(s)***—These three items are grouped, because when you look at one you see them all. Also, you should learn to see each feature relative to the others. These recognition features, along with the over-all hull design, should tell you the nationality of the ship.



Flat Type Triple Turret

- ***Gun turrets and missile launchers*** — This is the clincher. Here you should concentrate on the main batteries or missile launchers. There is an especially good reason for this. If a ship is on the horizon you will no doubt only see a silhouette of the ship with items such as the main batteries or missile launchers contributing to the silhouette mass.

YOU MAY ALSO FIND it easier to identify a ship if you learn its re-

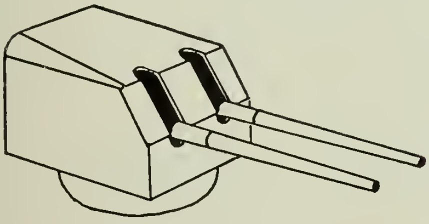
Shapes?

cognition features by name.

The masts, for example, will vary between ships, but usually conform to the general designs shown in the accompanying drawings. The pole mast and the tripod mast may look much the same from a distance. The important thing to remember in this case is whether or not the mast is raked.

When you study a ship's armament you might note if the turrets are box-like, flat, or round; the type of rocket launcher aboard; and whether the ship's secondary guns are or are not shielded. Also remember that a shielded gun may resemble a small box-like turret from a distance. Location in this instance is the more important aspect.

A ship's stack is almost always one of her more distinguishing identification features. It is not so much the shape or size alone that is important, but the combined features of size, shape and, more important, the position relative to the superstructure. Here again, it may be difficult to distinguish the shape from a distance, but you should remember its position relative to masts and superstructure and whether it is raked or vertical. You might also remember if it is capped, but don't allow this one easily-changed feature to disrupt your identification. (Nuclear powered ships – CVA(N), CG (N) and DLG(N) – do not have stacks.)



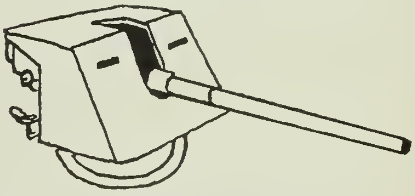
Box Type Twin Mount

For the most part, we have discussed ship recognition as it would be from ship to ship. From the air you must change your objectives somewhat. You should look for the outline of the hull, location of stack or stacks, and the location of main batteries, secondary batteries and/or missile launchers.

IF YOU LEARN to recognize many different types of foreign ships, it is commendable. But if you can't even identify ships of your own Navy, you had better get to work. If for no other reason than self-respect, you should, when you see a U. S. Navy ship on the horizon, be able to tell her type and class. This is a minimum. And – one day, recognition could save your life and the lives of your shipmates.

This article couldn't even begin to tell you everything there is to know about every type of Navy ship (security considerations, and space, for one thing wouldn't let us), but we do hope to whet your interest with this unclassified report.

As a point of departure, we will discuss a few major ship types and tell you the points of recognition with which you should be familiar. By looking for these same recognition features on other ships, you can learn to recognize ships of foreign navies as well as those of the U. S.

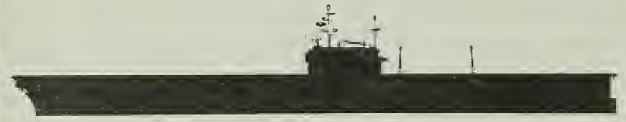


Single-Shielded Gun

AIRCRAFT CARRIERS – Perhaps the carrier is the easiest ship afloat to recognize. It has a familiar box-like silhouette with a relatively small island sitting on the starboard side of the flight deck. Armament is not easily seen from a distance, but it is normally located just below, and to the sides of, the flight deck. On a few older U. S. carriers, the silhouette looks as though a bite has been taken out of the bow just below the

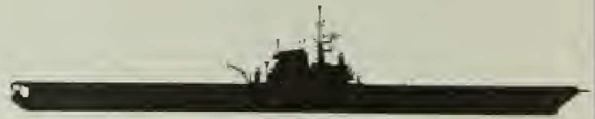
U.S. WARSHIPS

FORRESTAL—CVA



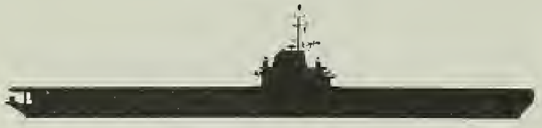
LENGTH 1039′ BEAM 130′
DISPLACEMENT 54 600

MIDWAY—CVA



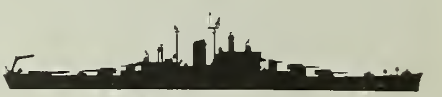
LENGTH 974′ BEAM 111′
DISPLACEMENT 51 000

ORISKANY—CVA/CVS



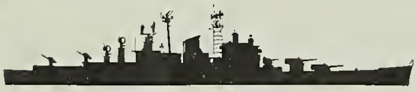
LENGTH 899 BEAM 102′
DISPLACEMENT 33,100

DES MOINES—CA



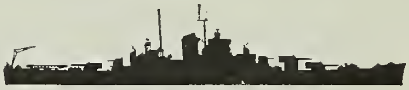
LENGTH 717′ BEAM 75′
DISPLACEMENT 17,000

BOSTON—CAG



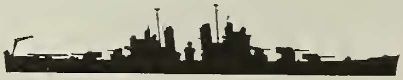
LENGTH 674′ BEAM 71
DISPLACEMENT 13,300

OREGON CITY—CA



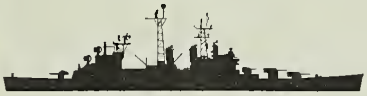
LENGTH 674′ BEAM 71′
DISPLACEMENT 13,700

BALTIMORE—CA



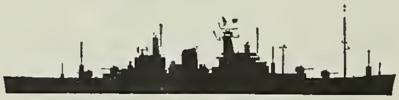
LENGTH 674′ BEAM 71′
DISPLACEMENT 13,600

GALVESTON—CLG



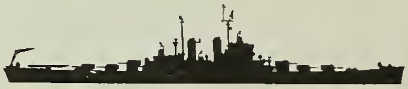
LENGTH 610′ BEAM 66′
DISPLACEMENT 10,500

NORTHAMPTON—CLC



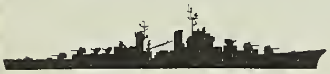
LENGTH 676′ BEAM 71′
DISPLACEMENT 13,000

WORCESTER—CL



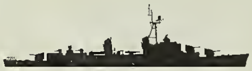
LENGTH 680′ BEAM 71′
DISPLACEMENT 14,700

NORFOLK—DL



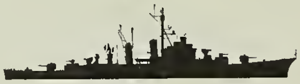
LENGTH 540′ BEAM 54′
DISPLACEMENT 5,600

GEARING—DD/DDE/DDG/DDR



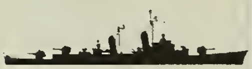
LENGTH 390′ BEAM 41′
DISPLACEMENT 2,400

MITSCHER—DL



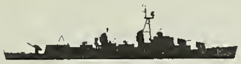
LENGTH 493′ BEAM 50′
DISPLACEMENT 3,500

FORREST SHERMAN—DD



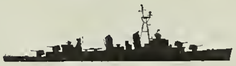
LENGTH 418′ BEAM 45′
DISPLACEMENT 2,780

GYATT—DDG



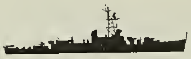
LENGTH 391′ BEAM 41′
DISPLACEMENT 2,400

FLETCHER—DD/DDE



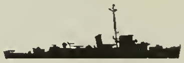
LENGTH 376′ BEAM 39′
DISPLACEMENT 2,050

DEALEY—DE



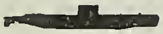
LENGTH 315′ BEAM 37′
DISPLACEMENT 1,340

BUCKLEY—DE



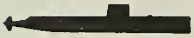
LENGTH 306′ BEAM 37′
DISPLACEMENT 1,400

TANG—SS



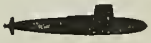
LENGTH 278′ BEAM 27′
DISPLACEMENT 1,670

NAUTILUS—SS(N)



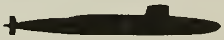
LENGTH 320′ BEAM 28′
DISPLACEMENT 3,180

SKIPJACK—SS(N)



LENGTH 252′ BEAM 31′
DISPLACEMENT 2,850

GEORGE WASHINGTON—SSB(N)

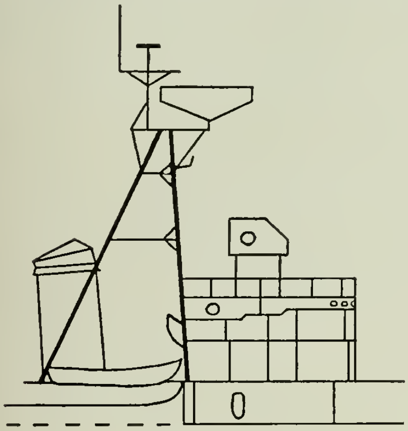


LENGTH 380′ BEAM 32′
DISPLACEMENT 5,400

Cargo ships, transport ships and Fleet oilers are an important part of the auxiliary fleet. Ships and men must be supplied and resupplied around the world. Most of these are built on merchant type hulls.

One attack cargo ship, for example, has a regular merchant-type hull with a sort of half-moon removed from the hull between the superstructure and the bow and again between the superstructure and the stern.

On the forecastle, aft of the two gun tubs, are two vertical king posts. Halfway between there and the superstructure is a pyramid-shaped frame (called the quadrupod mast), from which booms are extended. On the fantail is a second quadrupod mast of the same type. Additional guns are also mounted on the fantails of some AKAs. The ship's single vertical stack extends skyward from the center of the superstructure, and a lattice type mast is forward of the stack.



Tripod Mast

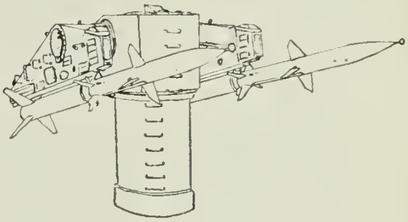
SHIP SHAPE—With practice, ships can be identified as easily as autos.

Fleet oilers, ammunition ships and some other supply type ships have the same over-all hull design as the AKA. Each type, however, has its own recognition features.

THE NAVY has many other ships that are just as important as those we have mentioned and you should be familiar with them. We have only attempted to show you how to recognize ships, not furnish you with a recognition manual.

As you become more and more familiar with our own ships, as well as those of different countries, you will discover that each nation has its own ideas about how a ship should be built. For that reason, you can many times tell the nationality of a ship even before you recognize the type. (Be careful of this, however, because many countries build ships and then turn them over to other countries for use.)

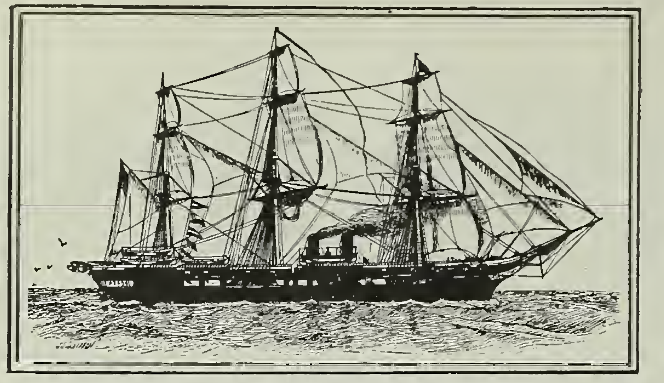
Recognition experts may have other tips to offer after this article is published. If they do, we'll pass them along to you. In the meantime, use what we have suggested. You'll be surprised how interesting recognition can be. Besides that, you'll learn something that could save your life one day.



Terrier Missiles and Mount

— Erwin A. Sharp, JOC, USN

SALTY KNOWLEDGE—In an emergency, knowledge of ship types and classes could become very important.



NAVY NEW

If no more, one can always say that the New Year's logs are traditional. Some of them are pretty good, too. As almost everyone knows by this time, each year on New Year's Eve, the OOD is encouraged by Navy tradition to write his log in verse. Yet he

USS Pickaway (APA 222)

New Year's Eve has been, through long tradition
A time for parties and fun. In addition
It's thought to be, by everyone polled
A miserable time to have the duty. Cold
And boring quartersack standing
Is a thing of the past. Here I am handing
On to the Fleet a record of how
We're having a party right here by the brow.

To bring in the New Year, we're having a ball,
With fun and gaiety and all:
For decorations, tasteful and plain,
We have 14 fathoms of port anchor chain
Artistically draped to Buoy Three-Nine
Where we've moored since the days of Auld Lang Syne.
Astern, to buoy 40, to complete the decor
Are two ropes of wire, 100 feet or more.

A large and roisterous crowd is here:
Three of us, gathered to hail the New Year.
All these guests were attracted, I suppose,
By the delicious refreshments, with which I propose
A toast! Scotch and mizu?
No, a bucolic
Group, we want nothing in the least alcoholic.

The refreshments were brought to the watch by the messenger
– Only coffee, of course; it's far less injur –
Ious than what's being sipped on the beach by the benighted
And unlucky people who were not invited
To these gay festivities here on the Pickaway
Where we saw the last seconds of '60 tick away.

In spite of the gaiety, we're being discreet
Lest our singing disturb COMFIRSTFLEET
He's senior to us, so we'll hold down the noise
Of this New Year's Eve party here at the buoys.
We're getting sympathetic thoughts from friends ashore.
They think New Year's Eve aboard is a bore!
All they have is bright lights, maybe a flask . . .
We have Boiler Two, Generator One! What more could you ask?

Yoke (modified) is set so we'll remain afloat
If this party should take on a wilder note.
The thrills and excitement will rise like a flame
When the bosn's mate and I play a party game
Of skill – tensely fought – with honor at stake
Called "Keep the Messenger of the Watch Awake."

Various units of the Pacific Fleet,
Yard and district craft too, noisily greet
The New Year with blasts from their whistles and sirens,
And poetry better than George Gordon, Lord Byron's
Could ever have been, had he composed his verse
On a cold quarterdeck at night; or worse,
If he had written the log of a ship, let's say
In the first four hours of New Year's Day
When San Diego is noisy and gay.

And the sounds of life carry all the way
Across the bay
To the APA
Where I must stay
To my dismay
Until in the gray
Of the dawning day
I hear the man say:
"I relieve you."
Hooray.

— R. L. Royalty, LT(JG), USN.

USS Zellars (DD 777)

Tis midnight on Zellars, *the watch has been set,*
The noise of the New Year is ringing here yet,
And from our deck we hear a loud crash,
It's the Italian custom of emptying trash.

To Molo Angioni, Berth 70, with Med-moor we're tied,
Purdy, Cecil, Moale *and* Leary, *starboard to port-alongside,*
The city is Naples in old Italy,
Land of the Romans, across the sea.

Starboard anchor with 58 fathoms of chain on the bay floor
Has been holding us tight as we float in our moor,
The port anchor is beneath us, in mud bottom I'm told
– with 10 fathoms of chain, it really should hold.
Commodore Ring is embarked with us too,
Commander of DESDIV *One-Sixty-Two,*

EAR'S LOG

is also bound by Navy regulations to enter certain information in the log. To combine the two is challenging, and many a rhymester has gone down to defeat. Here are excerpts from a few New Year's entries that have been sent to us in the past year.

Captain Higgins is skipper of this mighty fine ship,
While XO, LCDR Kenyon, is cracking the whip.

Number One Boiler is now on the line,
And Number One Generator is running just fine.
The ship is secured and YOKE has been set,
Those who are sleeping have nothing to fret.

Ships present include units of our mighty Sixth Fleet,
Italian navy, merchant and harbor craft are all under feet;
SOPA is COMFAIRELM *who is based on the beach,*
(I hope everything's covered in this little speech.)

Smoke is now clearing from fireworks fired.
Shore patrol is returning (0150) and boy, are they tired.
Zellar's *officers and men appear in good cheer*
Wishing you one and all, a Happy New Year.

— E. M. Jarvis, RMC, USN.

USS Owens (DD7 827)

From: *CTU 83.4.2*
To: *TU 83.4.2*

Unclas is a word we must use here
And I wish you all a Happy New Year.
So try your luck and submit your poems
Of your midwatch log in USS Owens.

From: USS R. A. Owens
To: CTU 83.4.2

A. *Your 010310Z*
Here is the best I can do for ye.

Once upon a midnight clear
Came the dawning of a New Year.

Steaming with Lind, Borie *and* New
— Western Atlantic's the scene —
We find ourselves in Station Two
Of a 'centric circular screen.

Formation course is 090
At 10 knots along we skip.
The OTC, COMDESRON *36's our hero,*
In Owens, *world's finest ship.*

With Commander Task Group 83.4 OpORD
11-60 we're in full accord.

In Station Four,
The guide is USS New,
4200 yards,
Bearing 135 degs true.

Material condition YOKE
And readiness condition IV
Are set; on such a fine night,
One could ask no more.

0108 *The guide was shifted to* USS Borie
Why, here is a very great mystery!
But the deed is done;
She's in Station One
Bearing 045, same range is the story,
And the whole event is history.

0215 *The guide is shifted now to us.*
This causes much less fuss.

0315 Lind *is now guide*
Ere I woulds't to abide —
(This New Year's midwatch poetry
Comes hard to men who go to sea.)

— The OOD

USS Orleck (DD 886)

A new year starts, the old one is through,
And here sits the duty section with little to do.
To port lies MacKenzie, *with standard moor*
At Yokosuka Harbor, Buoy Delta-Four.
Present in a nest, of tin cans three,
And a tender to give us services free.

"Tender" service, destroyers need
To remain fighting units of strength and speed.
So the cold watch, having jobs to do,
Is set in engineering spaces, and quarterdeck, too.
But if Seventh Fleet calls with a task for us,
We're ready to answer with nary a fuss.

From port to starboard, within the nest,
We hear the muster call:

USS Dixie	*"Aye;"*
USS MacKenzie	*"The best;"*
USS Orleck	*"Ready;"*
And USS Eversole	*"At rest."*

Condition Readiness IV and Yoke (modified)
Are set in our ship, which is fit to be tied.
While in the harbor, such units meet
As JMSDF and U. S. Seventh Fleet.
SOPA is COMSEVENTHFLT *aboard* St. Paul
And a Happy New Year we wish to all.

— Keith M. Ott, ENS, USN.

If your OOD has tried rhyme this year, send a copy to us.

BIG JOB—Disarming a bomb like this is no job for the timid. Here, student applies classroom knowledge.

EXPLOSIVE ORDNANCE DISPOSAL

AT INDIAN HEAD, MARYLAND, a folksy community (population 789) 30 miles down the Potomac River from Washington, D. C., a small cluster of buildings forms the nerve center of a unique organization – the U. S. Naval School, Explosive Ordnance Disposal. It is the only U. S. service school which trains officers and enlisted men from all the armed forces in the art of handling, disposing of, and rendering safe all types of ordnance.

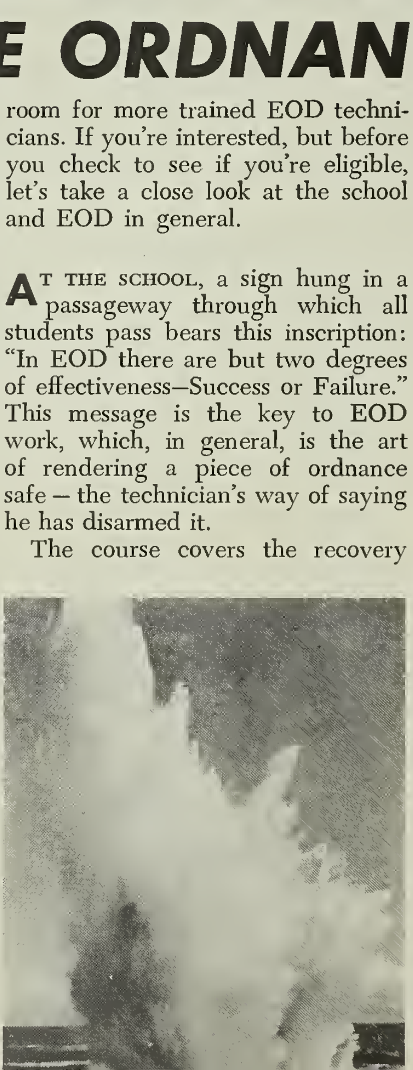
The Navymen there learn, live and work EOD until they become experts in the field. The course is tough, but to a man, they agree it's worth the effort. Aside from training in the prestigious EOD Corps, these students enjoy such fringe benefits as:

- Duty in a small town . . .
- that's close enough to the nation's capital for weekend excursions . . .
- to spend the extra money they make in EOD . . .
- while living in some of the Navy's nicest housing.

Sounds good? It is. And yet not an overbundance of Navymen apply for EOD training. At present there's room for more trained EOD technicians. If you're interested, but before you check to see if you're eligible, let's take a close look at the school and EOD in general.

AT THE SCHOOL, a sign hung in a passageway through which all students pass bears this inscription: "In EOD there are but two degrees of effectiveness—Success or Failure." This message is the key to EOD work, which, in general, is the art of rendering a piece of ordnance safe – the technician's way of saying he has disarmed it.

The course covers the recovery and disposal of all types of explosive weapons, both foreign and domestic. Every type of ordnance is studied – from old-time cannon balls to modern guided missile warheads. Regardless of the size, shape, type of fuse or explosive filler, or which country produced it, the chances are pretty good that EOD School graduates know something about it and can disarm it safely. (They also receive training in demolition of explosives underwater as part of their EOD training.)



There are many different approaches to rendering a piece of explosive ordnance safe. It all depends on the type of the ordnance and the conditions under which the EOD man must work. For example, a highly complicated explosive device planted as a booby trap may require many hours of work to disarm it safely. Under many circumstances, it wouldn't be worth the trouble. So, rather than try to render it safe, the EOD technician may plant another explosive charge and destroy it. Or, he can probably figure out what sort of force is necessary for the bomb to explode through its own charge, and go ahead and apply that force from a distance with a piece of line or long stick.

Each situation may call for a different approach, and this is where the EOD student's schooling really pays off. The nature of EOD requires the ultimate in teamwork.

In a somewhat technical way, explosives can be defined as substances, either solid or liquid, which, under the influence of some disturbing agency, enter into a chemical reaction which results in the production of gases and the evolution of heat. This reaction takes place in a short time and is accompanied by shock.

Although little is known definitely about the origin of explosives, it is believed by some historians that "Greek Fire," a preparation of pitch, resin, saltpeter, and sulphur, used during the defense of Constantinople about 660 A.D., was the forerunner of gunpowder and the first man-made explosive compound.

RAINING

Arabs used gunpowder early in the 13th century, but its discovery is generally attributed to Roger Bacon of England, who mentioned it in 1270, and to Berthold Schwartz of Germany, who described it in 1328.

Bombs, as we more or less know them today, came much later. The Austrians used bombs in 1849, suspending them from balloons. This was outlawed for some time by a world agreement.

Bombing techniques became highly advanced in the 20th century, and it was during World War II that EOD teams were first established. But it was Britain, not the U. S., that led the way. The EOD School at Indian Head, and the teams of U. S. Navymen trained there, are an outgrowth of Britain's experiences with bombs and mines dropped by German aircraft.

Many tons of these complicated explosive devices were intentionally fused to explode from one hour to several days after being dropped. The danger was great, but many observers close to the scene say their demoralizing effect was even greater.

Faced with the problem of recovering and disposing of these bombs and mines, and other, nonfused bombs which failed to explode on impact but were still dangerous, the British formed Bomb and Mine Disposal squads. These highly-publicized squads were comprised of small groups of volunteers who disarmed the explosives both on land and under water. Valuable information which contributed to the war effort was assembled by these men. They also devised tools and methods to cope with the ingenious ignition systems devised by the Germans, and recovered many explosive devices for study by allied scientists.

As a result of the wide publicity these EOD pioneers received, however, you might say the Germans got wise to many of their techniques and designed even more complicated bombs and fuses. Thus, the more complicated the mechanisms became, the more casualties were noted in bomb disposal ranks. The

FOR REAL — EOD team from Yokosuka, Japan, (above) removes dangerous 'souvenir' of WW II. *Below:* Classroom held at Indian Head.

Navy EOD expert chips coral from live torpedos in Japanese sub found after 18 years on bottom.

odds that one of these WW II British EOD workers would survive weren't very good.

During the Blitz, several U. S. Navy officers who were serving in London attache billets recognized the need for a similar program in this country. A team of U. S. officers was sent to England, studied the latest methods of bomb disposal, then returned to the U. S. to set up a school here.

THE FIRST EOD-TYPE SCHOOL was called the Mine Disposal School. This was established in May of 1941 at the Naval Gun Factory in Washington, D. C. Several months later a Bomb Disposal School was organized and worked closely with the Mine School. This was moved to the campus of American University in 1943.

Graduates of the Mine and Bomb Disposal Schools served in many areas of the world during WW II. They not only cleared channels, harbors and airfields of mines, duds, and delayed action bombs, but also provided detailed information about enemy ordnance innovations.

In November 1945 the two schools were combined and relocated at the U. S. Naval Powder Factory, Indian Head, Md., which has since been renamed the Naval Propellant Plant. In 1947 the responsibility for EOD training for all services was given to the Navy, and officers and enlisted men from all the services were added to the school's staff.

Although the EOD School is located at the U. S. Naval Propellant Plant, Indian Head, Maryland, it is a separate command with a commanding officer and an executive officer. The school is under the management control of BuPers and under the military command of the Commanding Officer, U. S. Naval Propellant Plant.

The EOD organizational structure includes an academic board which hears the case of any student who doesn't match up to team standards, or who falls off in scholastic standings. The board includes the school's executive officer, training officer, the liaison officers of the other services, and the student's division officer. It can, after hearing the student's explanation of his unsatisfactory performance, recommend that he be continued on in class or dropped from the course of instruction.

THE SCHOOL'S 87 INSTRUCTORS are some of the world's most knowledgeable men in the field of explosives. The teaching staff is comprised of both officers and senior enlisted men from all the services. They know the most intricate details of each piece of explosive mechanism they handle. Each instructor has lots to say to each student, and says it in a hurry. There is no room for error in EOD, and of necessity therefore, the instructor's message must be interpreted quickly and correctly. To learn the ins and outs of EOD in 26 weeks requires constant concentration and practice, over and over again.

RIGGING AND DIGGING — Navy EOD students at Indian Head, Md., school learn the ropes for removing a projectile from its crater.

Navymen must not only be able to dispose of bombs on land, but must also cope with underwater ordnance, necessitating a study of diving techniques. Otherwise, the course taken by Navymen, Airmen, Armymen and Marines is identical.

Before checking in at Indian Head, prospective Navy EOD technicians must first receive 10 weeks of Scuba and Diver 2nd class training at the Underwater Swimmer's School in Key West, Fla. This is chiefly concerned with the use of conventional diving gear, which leads to a "Scuba Diver 2nd Class" status. Later, while in training at Indian Head, each Navy student receives more advanced diving training in the Potomac River, which probably comes closer to conditions encountered in the Fleet than in the clear waters off Key West.

This diving training at Indian Head is conducted year round, not just during summer months. At times, students must chop their way through several inches of ice before they can submerge to work on a problem. Most students would, in fact, rather catch their diving phase during the winter. It's good practice for working under the extreme conditions they may encounter later when the chips are down.

Diving training at Indian Head, which lasts for six weeks, is one of six phases of the entire Ordnance Disposal course. Students progress from one phase to another, each in turn more complicated and advanced. Over all, this could be considered instruction in the various principles that are used to arm and fire the electrical, mechanical and chemical ordnance and explosive fillers designed by all countries.

PHASE I OF THE EOD COURSE lasts about two weeks. Here students learn applied physical principles, systems of measure, simple machinery, principles of motion as applied to ordnance, energy and fluid resistance.

Phase II, which entails another two weeks of study, deals chiefly with dropped munitions, guided munitions, explosive seat and canopy munitions, and various miscellaneous explosives. One of the more technical aspects of EOD crops up in Phase II.

Students must learn to determine the size, type, and route of entry of a dropped projectile (bomb) by the size and angle of the hole it makes on impact, and must be able to determine if the ordnance exploded or is intact.

Once located, it must be rendered safe. However, many times the fuse or entire bomb should be salvaged for further examination, and this the student is taught to do. Phase II also covers the payloads of guided missiles.

Phase III, which lasts for about three weeks, covers advanced EOD techniques, practical operations, and demolitions. Techniques is actually a nuts and bolts job which consists of tools and methods. Every known piece of ordnance has a special tool or method which should be applied when it is to be disarmed.

Demolitions training covers the process of applying the right amount of explosive to a piece of ordnance so that it will either be completely destroyed, or broken up for study, whichever is desired under the circumstances. Or, in many cases, the EOD man will simply want to render it safe.

Phase III also includes practical application of what is learned in the classroom. Students move to the demolition firing area of Stump Neck Annex, a somewhat isolated, wooded area which closely resembles a jungle. (Incidentally, the area abounds with wildlife.) Here a variety of problems are presented, which may range from rendering safe a small fuse found on a jungle trail, to checking out a wide variety of some of the heaviest pieces of ordnance hidden in an overgrowth of brush.

If a problem is handled improperly, a harmless but noisy token charge is detonated from a safe distance as a means of letting the student know he did something wrong.

The jungles of Stump Neck are said to make or break an EOD hopeful. Everywhere he turns, a student will more likely than not walk into some kind of "confidence" course, which is an area littered with bombs, mines, or booby traps. The idea is to build up each student's confidence by providing him with plenty of problems to solve. Each piece of ordnance he comes across must be identified and rendered safe on the spot. Of course, a small charge will let the student know he's goofed if he doesn't do things just so. Here, as well as in all other aspects of the course, special emphasis is placed on safety.

TOP PHYSICAL CONDITION is also a necessity for EOD work. This is made quite clear to each student by the time he's finished a week of rigging and digging during still another phase of training at Stump Neck's Access and Recovery branch. Says the "rigging & digging instructor," a GM1: "When the students come here, they hang up their hats. All I want to see is strong backs and blisters." He sees plenty.

Actually, Navy students have an edge on other EOD learners during this phase of training. Each man must be taught several basic knots which EOD technicians use rather frequently. Most Navy students already know these knots and how to use them. They include the cat's paw, bowline, clove hitch and half hitch. Each time a heavy bomb is lifted from its shaft there are certain knots that must be used correctly.

Also at Access & Recovery, students are taught to use a block and tackle which eases some of the muscle work involved in lifting out a bomb. But, no matter how you look at it, a shaft exactly 6 feet 8 inches by 8 feet, by however deep the ordnance has burrowed itself, must usually be dug out by hand, and this does require muscle.

Phase IV is the Navy students' underwater training at Stump Neck, which was mentioned earlier. Here they get the chance to combine their diving and underwater ordnance skills. This lasts for about six weeks, during which each student spends several days working on mines at the bottom of the Potomac, rendering them safe, floating them, bringing them ashore, and completely stripping them.

Also included in Phase IV are courses in hard hat diving and underwater welding. (Each Navy student must requalify in diving every six months. This can be accomplished in the Fleet, if he's working in a billet that has diving duties, or at any diver's qualification tank. It's not unusual to see several men arrive at Indian Head each day simply to requalify in hard hat. There is a large tank at the school in which this can be accomplished.)

PHASE IV — EOD student learns the art of working underwater, while using torch in diving tank.

HERE'S HOW PHASE IV is broken down: The first eight days of study are in the field of influence mines, which explode when affected

BACK THEN—A WW II Navy mine disposal diver places charge that will cut leads to firing gear.

FIELD WORK—Students examine piece of small ordnance, found along 'jungle' path at Stump Neck Annex, to determine how to disarm it.

by some outside influence —namely a ship passing over or near one. There are various types of influence mines. One such type is the magnetic mine which detects changes in the magnetic field, thus actuating the mine. Another type is the acoustic mine, which "listens" for the noises made by approaching ships, then fires the mine when the noise level reaches a certain point.

The next step through Phase IV is a week of study in the contact mines which were quite popular during WW II. These fire only when a ship strikes them. Again, students must be able to handle these mines with clockwork efficiency. The following week of study is all about torpedoes. Then there is a week of diving and underwater work techniques, followed by two weeks of intensive practice with mines.

Phase V of EOD training requires another move – this time to Eglin Air Force Base in Florida – where live ordnance is dropped to simulate field conditions. This is actual EOD work with standard ordnance, performed by the students under the close supervision of instructors from the school who also make the trip. Here's where the schooling at Indian Head really shows, and the many hours of practice pay off. By now each student can identify nearly any piece of explosive ordnance available by its country of origin, know its fuse, filler and capabilities, and can render it safe or destroy it.

EASY DOES IT — Instructor shows how to get rid of an unexploded bomb during phase III of training.

After returning to Indian Head, most students receive an intensive course in the procedures for disarming nuclear-type weapons. This is Phase VI, the final step in EOD training.

When the course is completed the new EOD technicians are sent by their service to field units. Graduates are scattered across the world, you might say. They serve on board aircraft carriers, ammunition ships, seaplane tenders, net layers, at ammunition depots, with harbor defense units, at the two major Navy EOD units in Charleston, S.C., and Pearl Harbor, Hawaii, and at various U. S. bases and overseas activities. Frequent refresher courses in new weapons are required, so all EOD workers return to the school at regular intervals.

If you're interested in EOD, here's how you seek assignment to the school at Indian Head. You must be an officer, or petty officer of one of these ratings: AO, BM, EM, EN, GM, MN, GMT, or TM. You must volunteer, and must be willing to undergo intensive training and study. If you're an enlisted man, your GCT must be at least 55, and your MK ELECT or MECH at least 50. You must be cleared for Top Secret work. Enlisted men who are not qualified in Scuba and as Diver 2nd Class before enrollment must first attend the Underwater Swimmer's School in Key West and successfully complete a 10-week diving course.

Officers must agree to remain on active duty for 18 months after graduation. All requests should be directed to the Chief of Naval Personnel, via normal chain of command channels.

If accepted, once you arrive at Indian Head you'll find the housing situation is excellent. Married students, both officers and enlisted, occupy large, apartment type units which have recently been completely remodeled. And there's no waiting for housing. Students who are accompanied by their dependents can move right in to some of the nicest housing in the Navy.

For bachelor officers, and officers unaccompanied by dependents, a better than average BOQ with the usual services is located on station. Unmarried enlisted students are quartered in the station barracks.

Normal class hours are from 0730 to 1600, Monday through Friday. In theory, all evenings and weekends are "free," but in practice are actually spent in afterhours study, which is not mandatory, but is necessary for students who want to finish the course. There hasn't been an EOD student yet who could make it without doing plenty of night work. It's necessary to keep up with your class. Otherwise, you're dropped from school.

You could also be dropped from the course if you lack mechanical ability or become nervous while handling explosives. About the worst thing your instructor could say concerning your suitability for EOD is that he would not care to work with you in the field.

Finally, for the record, the mission of the EOD school at Indian Head is to train officers and enlisted men of all services in the best methods and procedures for the recovery, evaluation and disposal of surface and underwater explosive ordnance, both conventional and nuclear, employed by the United States and other nations. The students know that few official statements cover so much dangerous ground—and water —as the mission of EOD.

— Dan Kasperick, JO1, USN

Long Beach Goes Fission

FOR THE FIRST TIME in its history, the surface Navy has "gone fission."

This situation first occurred when USS *Long Beach*, CG(N) 9, the Navy's first nuclear-powered surface ship, was commissioned in September 1961.

The new 14,000-ton guided missile cruiser – 721 feet long, 73 feet wide and powered by two pressurized water reactors – is capable of cruising at speeds over 30 knots. Her range is almost unlimited.

Armed with both *Terrier* and *Talos* missiles, *Long Beach* adds strength to our defense forces afloat.

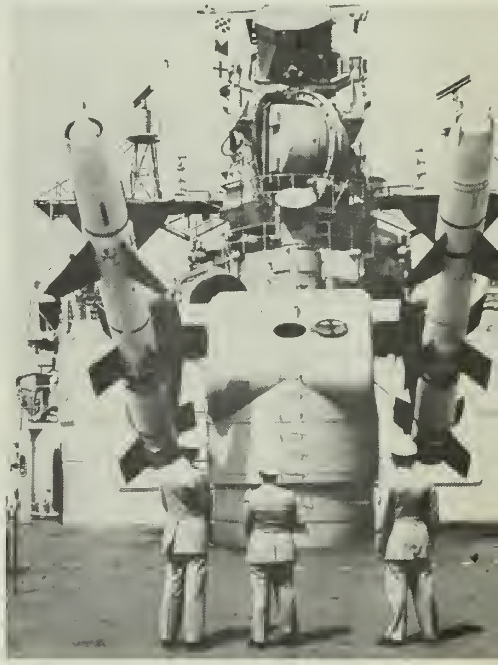
The cruiser's guided missile system, designed to destroy enemy aircraft carrying air-to-surface missiles, can intercept either planes or missiles far from the ship.

Occupying space sufficient to hold approximately 10 freight cars, *Long Beach's Talos* handling system weighs more than 350 tons. The system's missile hoist is said to be the largest single piece of ordnance in the Navy.

The nuclear-powered cruiser is operating with the Atlantic Fleet and calls Norfolk her home port.

Clockwise from top: (1) The nuclear-powered guided missile cruiser USS *Long Beach*, CG(N) 9, moves through calm waters of the Atlantic. (2) Two officers and a chief petty officer get a close-up look at the *Talos* surface-to-air, long-range missiles which make up *Long Beach's* main battery. (3) The first helicopter landing is made on the fantail of *Long Beach*, Navy's first nuclear-powered surface ship. (4) Crew members aboard *Long Beach* make preparations for getting the guided missile cruiser underway.

—Able Register, JO1, USN.



BACK TO SEA—*USS Daniel A. Joy* (DE 585) readies for DesLant duty. *Below:* R.E. Ketchum, SN, USNR, who will sail with his ship, mans line.

Reservist Burch was a policeman.

These

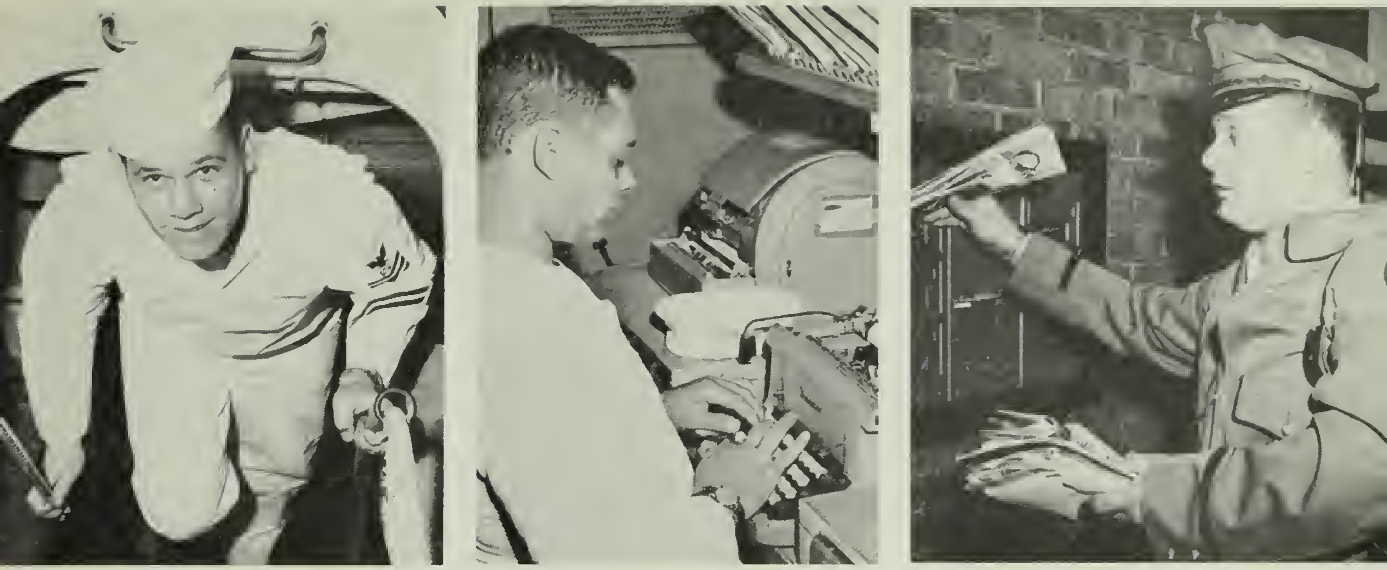
AFTER MORE THAN 11 years of fresh-water cruising, USS *Daniel A. Joy* (DE 585) is once again feeling the salty spray of ocean waters.

Joy, the largest ship of the Naval Reserve's "Corn Belt Fleet," was one of the first of 40 Selected Reserve training ships to report for active duty in the recent partial mobilization.

Long a familiar part of the Great Lakes waterfront scene, *Joy* left her Chicago berth early in October to take her place in the destroyer force of the Atlantic Fleet. After her departure from the Naval Armory at the foot of Randolph St., *Joy* cruised via the St. Lawrence Seaway to her new home port, Newport, R.I., for final inspection and fitting out before joining the Atlantic Fleet as a member of Escort Squadron Eight.

Her crew members, specialists in antisubmarine warfare, are scheduled to undergo intensified training en route to the Fleet training area at Guantanamo Bay, Cuba. For most of the crew, the training will be "old hat" – similar to that received in earlier ASW exercises. Once her training is completed, *Joy* will become an integral part of the U.S. Atlantic Fleet, with further assignments being handled in the same manner as other Navy ships.

Joy, like other Selected Reserve ships, has operated as a DE with two crews—one an active-duty nu-



NEW DUTY — Patrolman Burch is BM in *Joy*. *Rt:* R. Browdy pounds typewriter instead of mail route.

Reserves Sailed with Joy

cleus to supervise training and maintain the ship; the other, a Selected Reservist crew, with mobilization orders in their pockets. One week end a month—and for two weeks' active duty for training each year—the Reserve crew boarded the ship for training as a unit.

Thus, when *Joy* left Chicago she took along, in addition to her active-duty complement, her Reservist skipper and exec, five other Reserve officers and 75 Reserve enlisted crew members from the Chicago area. Another 23 Ready Reservists—volunteers from the Midwest—"signed on" to bring the ship up to full strength.

The Reservists were given several weeks notice of their call to active duty, but could have been underway on board *Joy* in a matter of hours.

Joy's crew—again like those of other Selected Reserve ships—represents a wide range of backgrounds.

Starting at the top, we find CDR Robert F. Flott, USNR, scheduled to assume command at Newport, who has had 20 years of Reserve time, including five years on active duty. In civilian life he has been associated with an insurance firm.

LCDR Raymond A. Wells, USNR, prospective XO, is a TV director. He has spent 13 years in the Naval Reserve. LCDR Wells served two years on active duty, logging sea duty in the Atlantic and Pacific.

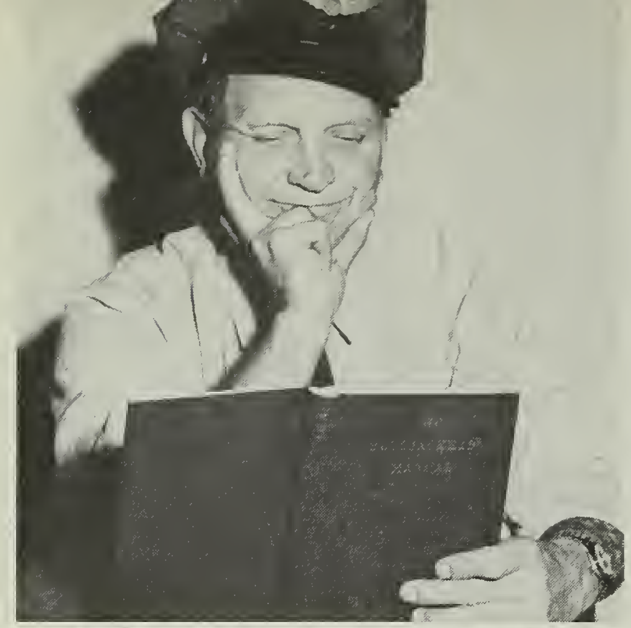
Joy's Reserve crew also boasts a 62-year-old salt, Walter A. Frogner, SMC, USNR, a veteran of both World Wars. Frogner has 27 years of Navy life behind him — 10 of them on active duty. He was a bus driver between AcDu assignments, and retired from this occupation shortly before reporting on board *Joy* for this tour.

Another crewman, Donald R. Burch, BM1, USNR, leaves a police assignment as drill and small arms instructor for duty in *Joy*. One young sailor, who had received his Navy discharge just four weeks before the call-up, also was aiming for a policeman's career. He was in his first week of Chicago police school when he got the word.

A Reservist with a different beat, postman Robert Browdy, PN3, USNR, is now pounding a typewriter in the ship's office instead of the sidewalks of the Windy City.

And so it goes. Some of the Reservists are just out of high school; others are married, have families,

RESERVE SKIPPER of *USS Daniel A. Joy*, CDR R. Flott (left) receives ship's commissioning pennant during departure ceremonies in Chicago.



OLD SALT—Bus driver W. L. Frogner brushes up after recall. *Rt:* Joy looked like this on '50 trip to Chicago.

and were more or less settled in their dual lives as civilians and part-time sailors.

The ship got quite a send-off when she left her Great Lakes home. Taking part in the departure ceremonies were Mayor Richard J. Daley of Chicago and RADM Ira H. Nunn, USN, Commandant, Ninth Naval District. The Training Center band provided music for the occasion.

There were tears, too, as parents, wives and children bade their Navymen good-by. One newspaper headline reported "Sadness Reigns As Joy Departs."

Wives and children of the Reservists were guests for a day at the Great Lakes Naval Training Center, where they toured the base and were briefed on the special benefits for which they are now eligible as dependents of men on active duty.

Joy's Reservists have been ordered to active duty for a maximum period of 12 months. Once they've completed their Fleet readiness training, they'll escort convoys and take part in ASW exercises.

As for *Joy*, she's used to action. Named for the late Daniel A. Joy, a Navy pharmacist's mate who was decorated posthumously for extraordinary heroism at Guadalcanal, *Joy* was commissioned in April 1944.

Joy performed escort and patrol duties in the Philippines, New Guinea and Admiralty Islands areas under repeated Japanese air attacks.

Engaged in action near Okinawa when the war ended, *Joy* continued to operate in Asiatic-Pacific waters for several months, performing routine patrols. In 1946, she returned to the U.S. and was assigned to the 13th Naval District to train Reservists. The DE operated out of Seattle until she was transferred to the Ninth Naval District in 1950.

In a historic, headline-making trip, *Joy* was towed more than 1500 miles through the Mississippi and Chicago River systems to Chicago. For this voyage, *Joy* had to have her propellers removed and her mast shortened. *Joy* was placed back in commission at Chicago in May 1950.

Although *Joy's* departure means the loss of the Navy's largest ship on the Great Lakes, seven patrol-type ships and three submarines continue to operate in the area, training Reservists.

Meanwhile, parden the pun, *Joy* reigneth supreme, fulfilling her assignment as a Selected Reserve ship on duty with the U. S. Fleet.

BYE NOW—Dependents bid farewell to *USS Joy* leaving for active duty.

CONTRAST — Men in colonial dress watch atomic cruiser sail by *USS Northampton* and French ships.

Return to Yorktown

HAD THE U.S. and French Navies during the Revolutionary War been equipped with the modern fighting ships which lay anchored off the shores of Yorktown, Va., on 19 Oct 1961, Lord Cornwallis might not have been around long enough to surrender.

The Battle of Yorktown, the last big battle of the Revolutionary War, took place over 180 years ago. On 19 Oct 1781 Lord Cornwallis, the commander of British forces at Yorktown, surrendered his troops to General George Washington. An annual celebration is held in Yorktown to commemorate the end of this important battle for our freedom.

This time, as part of the celebration, the cruiser USS *Northampton* (CLC 1), anchored in the York River along with the French destroyer leader *Chateau Renault* and three French destroyers, *Forbin*, *Guerpratte* and *Chayla*.

In Yorktown on the day of festivities, *Northampton* Navymen and Marines marched in the parade alongside their French allies of today, as other American fighting men had done 180 years ago. Admiral Robert L. Dennison, USN, Commander in Chief, U. S. Atlantic Fleet, and His Excellency Hervé Alphand, the French Ambassador to the United States, were representatives of the two countries.

Colonial dress and old guns manned by Virginians uniformed as soldiers of the Revolution were common in Yorktown. The ships in the river, however, were quite unlike the ships of the Revolutionary War. These were among the most modern afloat.

An even greater contrast of past and present, however, came apparently by chance. As several men dressed in colonial uniforms looked out into the river at the ships anchored there, the U. S. Navy's nuclear-powered cruiser USS *Long Beach*, CG(N) 9, sailed past the historic spot.

After the festivities at Yorktown, the French ships visited Norfolk, Va., and USS *Northampton* joined Task Force 22 in the Western Atlantic for Second Fleet exercises with the electronic, nucleonic Navy.

FRENCH learn how cannon works. *Below: Northampton* joined French ships for 180th anniversary.

CHATEAU RENAULT took part in the celebration.

MARINE festival queen and court greet sweeps at Maizuru. *Below:* Visiting minemen found champion Japanese dog a friendly fellow.

WELCOME—LT. T. Freeman, CO of *USS Phoebe*, greets visitors in Kochi.

Fleet Leaders

THE SIZE OF a Pacific Mine Force minesweeper is more than just operationally important. With a shallow draft, short length and twin screws, the bird-named, wooden-hulled coastal sweeps of MINPAC are among the busiest and most popular Japanese port visitors in the Seventh Fleet.

And because these ships can get into almost any port – many never visited before – they often are the first and only United States ships to be seen by thousands of Japanese.

To illustrate, consider just one recent seven-day period when the coastal sweeps participated in five different Japanese port festivals. Two sweeps, USS *Peacock* (MSC 198) and *Woodpecker* (MSC 209), called at Maizuru and Tsuruga for two days each; *Vireo* (MSC 205) and *Widgeon* (MSC 208) visited Minamata for four days, and *Phoebe* (MSC 199) spent two days at Kochi and two days at Takamatsu. The 142-footers are units of Mine Divisions 31 and 32, homeported in Sasebo, Japan. They each have a ship's company of four officers and 29 enlisted personnel. Their mission is to sweep mines from coastal waters. With minimum support they can sweep mines almost anywhere in the world.

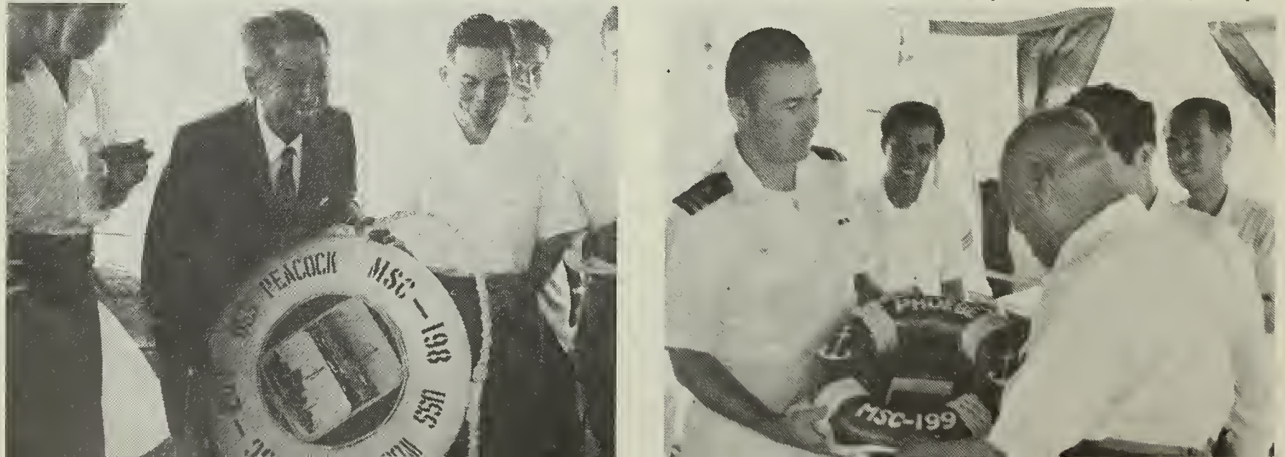
The Japanese port visits call for not only outstanding seamanship, in the inland waters of Japan, but also for outstanding characteristics of friendship. The Pacific Mine Force's "Fleet leaders" succeed on both counts.

Take *Phoebe's* visit to Kochi and Takamatsu for example.

Upon arrival at Kochi, the ship was greeted by delegations from the governor of Kochi prefecture, and the mayor presented the ship with flowers. In return, *Phoebe* gave the mayor a decorative life ring which contained a picture of *Phoebe*. The ceremonies were covered by local TV and press.

In the afternoon, *Phoebe* gave a reception for local dignitaries of the prefecture and city governments.

RINGERS — Officials of Japanese ports received ornamental life rings framing photos of visiting ships.



SWEEPING TREAT — No cones, but orphans enjoy ice cream. *Rt:* Mayor of Takamatsu is piped off *Phoebe.*

In Good Will

TALL TAIL — Officer holds up long-tailed Japanese rooster that was member of greeting party.

Later, the crew participated in a softball game against a local team, which *Phoebe* won. That evening the ship's officers were entertained at dinner by the members of the local Lion's Club.

The next morning the ship gave a party for 20 orphans. In return, the orphanage presented hand-painted fans to members of the crew. The officers and men of *Phoebe* also donated 7300 yen to the orphanage.

At noon the ship's officers attended a regular luncheon at the Kochi Rotary Club, where Lieutenant Thomas Freeman, the commanding officer, was guest speaker. During general visiting hours in the afternoon, 500 people toured *Phoebe.* Also during the afternoon, *Phoebe* lost a softball game to the Island of Shikoku champions. The game was televised locally.

From Kochi, USS *Phoebe* steamed to Takamatsu, on the northern coast of Shikoku. There the skipper was a guest at a regular luncheon of the Rotary Club, and during the afternoon *Phoebe* held an on-board reception for the mayor of Takamatsu and other local dignitaries. Another 500 Japanese toured during "open house," and *Phoebe* got back in the win column by defeating the mayor's softball team. That evening the members of the ship's crew were guests of honor at a reception in picturesque Ritsurin Park.

The governor of the prefecture toured *Phoebe* just prior to her departure.

In each city the minesweepers' visits were acclaimed, thousands of Japanese saw Americans and their ships for the first time and American-Japanese friendship and understanding were increased.

And this was just one week out of seven coastal sweeps a year. Visits to other ports are scheduled for the coming months. The trained and ready coastal minesweepers of the Pacific Mine Force, on duty with the Seventh Fleet, are continuing to uphold their proudest tradition: *They Lead the Fleet.*

BALL GAME opens in the Japanese manner. *Right:* Candy for orphans.

SERVICESCOPE

Brief news items about other branches of the armed services.

THE AIR FORCE and the National Aeronautics and Space Administration have teamed up for a project that may result in an unmanned space probe toward Venus by the middle of next year. The Air Force's *Atlas-Agena B* rocket combination figures in NASA plans to launch an unmanned *Mariner* space craft to the vicinity of Venus; a mid-1962 blast-off date has been timed to take advantage of the expected favorable relative positions of Earth and Venus.

Basic space equipment designed for use in future interplanetary flights will be checked out in NASA's 400-pound *Mariner*. A survey of magnetic fields in space, radiation experiments to detect and count energetic particles from the sun and a device to scan the surface of Venus for temperature distribution will all add to probe data.

★ ★ ★

ARMY RESERVISTS who are now reporting for active duty can expect increased emphasis on physical fitness during their training.

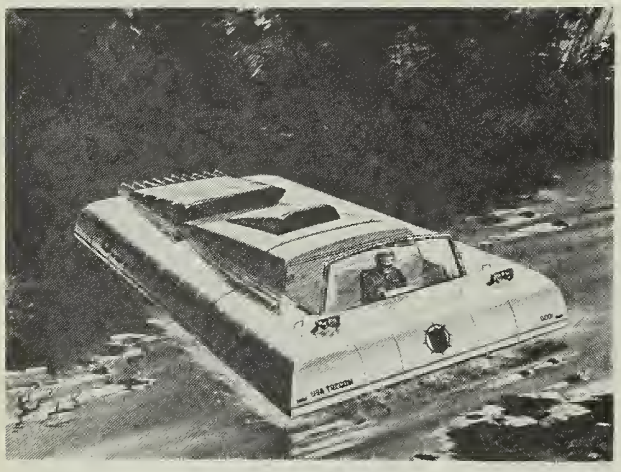
A relatively new program of physical fitness will stress exercises designed to increase a soldier's capabilities in long-distance walking, crawling and the "dodge and run." Some old exercises are being retained in the new program because of their usefulness in conditioning, but training objectives now are designed to provide more realistic and, therefore, more useful exercises.

Marksmanship will continue to be an important skill for the modern soldier. However, firing on known distance ranges at fixed targets is being replaced by new methods which include field firing at electrically operated targets that fall when hit by a bullet.

With few exceptions, men in the recalled units have completed at least 16 weeks of individual training, including their military occupational specialties. In addition, they have had about six weeks of basic unit or on-the-job training in their specialties.

Several areas of training are being given greater emphasis. Night training, for example, will be increased and Reservists will be introduced to new equipment, such as the Army's new M-14 rifle.

Some units will also be introduced to new electronic radar systems which can detect enemy troop movements at night, in heavy fog and at distances beyond the range of normal vision.



MAN-CARRYING air car, designed for high-speed land and water travel, is being built for Army.

ARMY'S M-48 tank moves inland during maneuvers on San Juan Islands off the coast of Washington.

New techniques of counter-guerrilla warfare will also be taught, and all units will be trained for operations in the desert, jungle, mountains or arctic regions.

To complete the training program, there will be joint exercises in which at least one of the other services will be involved. This phase will include amphibious and/or air mobility training.

★ ★ ★

THE COAST GUARD icebreaker USCGC *Westwind* (WAGB 281) is engaged in operations near Thule, Greenland, as part of a Military Sea Transportation Service Arctic resupply operation. Her services include escorting other, less stout, ships through the ice, reconnaissance, resupply, sea rescue and special assignments (such as installing auxiliary radio stations).

Westwind is one of three "Wind" class Coast Guard icebreakers; the others are *Eastwind* (WAGB 279), now in the Antarctic for operations with Deep Freeze '62, and *Northwind* (WAGB 282), on patrol in the Bering Sea.

★ ★ ★

IN A RECENT DEMONSTRATION of the "blind intercept" system, a U. S. Air Force Tactical Air Command pilot, flying a 1400-mph F-105D *Thunderchief* fighter, knocked down a jet target drone which was miles away and out of visual contact.

The pilot, a member of TAC's 335th Tactical Fighter Squadron based at Eglin AFB, Fla., was directed by a ground tracking station into the general target area. Once there the *Thunderchief's* blind intercept automatic target-seeking computer system took over, eventually launching a *Sidewinder* air-to-air missile. The pencil-slim, nine-foot *Sidewinder* is equipped with an infrared radar device which guided it to its target by seeking out heat from the jet drone – and just twelve and a half minutes after the initial scramble, it was scratch one drone.

The supersonic *Thunderchief* also carries the air-to-surface *Bullpup* missile, a 20 mm automatic cannon, and a variety of non-nuclear bombs in addition to nuclear weapons. Besides serving with TAC in this country, the *Thunderchief* fighter plane is also used by the U. S. Air Force in the European theater.

A NEW ELECTRICAL POWER GENERATOR, developed for the U. S. Army, runs so smoothly that during one series of tests a penny was stood on edge on an engine mount, and it remained upright while the diesel ran at full speed.

The smooth-running generator eliminates electrical voltage variations, thus enabling radar operators to locate targets with more precision. It was developed for the Advanced Research Projects Agency under Army supervision.

The generator will be used to power the advanced TRADEX radar, to be installed on the islands of Roi-Namur, part of Kwajalein Atoll, to observe target cones launched by *Atlas* boosters from California for the Army's *Nike-Zeus* anti-missile missile system test complex on nearby Kwajalein Island.

Unmatched precision in the control of electric power fluctuation will be provided by the 1500-kilowatt power generator, yet it is cheaper, lighter and more easily built than comparable power systems currently available.

The new generator equipment can be produced at a much cheaper per-kilowatt cost. Generators of similar application cost about $325 per kilowatt, while the new generating equipment costs about $129 per kilowatt of power.

Contracts for $1,467,115 have been awarded to provide seven of the new units. They now are coming off the production line.

★ ★ ★

THE COAST GUARD has unveiled an 82-foot, 26-knot patrol boat which features two 1000-horsepower gas turbine engines and a complete, console-type, pilot house control panel within easy reach of the steering wheel. With it, one man can make steering the ship and operating its engines and associated electronics equipment look easy.

Special gear for rescue work (the boat is scheduled to operate out of Miami, Fla., primarily as a search and rescue boat) includes a ring of floodlights around her hull which can illuminate a large area during night operations. She also carries a towing bit, a portable side ladder and a 16-foot plastic outboard motorboat which is launched from a boom.

The pilot house, built on a raised forward deck, affords 360-degree visibility.

The boat is the only gas turbine-powered craft in a new class now under construction at the Coast Guard Yard in Baltimore, Md.

GAS TURBINE-powered 82-foot patrol boat of U. S. Coast Guard is capable of speeds up to 26 knots.

'MECHANICAL MULES' of U.S. Army haul 101st Airborne Division airdrop equipment to an airplane.

★ ★ ★

A TACTICAL FORCE of more than 200 Air Force jet fighters has arrived in Europe in a movement described as the largest single deployment of fighter aircraft to an overseas area since World War II. The deployment of F-84Fs, RF-84Fs, and F-86Hs of recently recalled Air National Guard units was part of U. S. moves to beef up military strength in Europe.

Included in the deployment were units from Tactical Fighter Wings of Fort Wayne, Ind.; St. Louis, Mo.; Columbus, Ohio; Boston, Mass.; McGuire AFB, N.J.; and the Tactical Reconnaissance Wing of Birmingham, Ala.

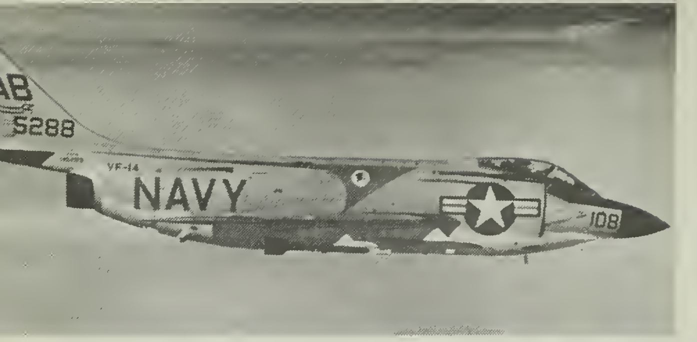
During the movement, 10 crews from five Reserve Air Rescue squadrons were recalled for 60 days of duty to augment Regulars.

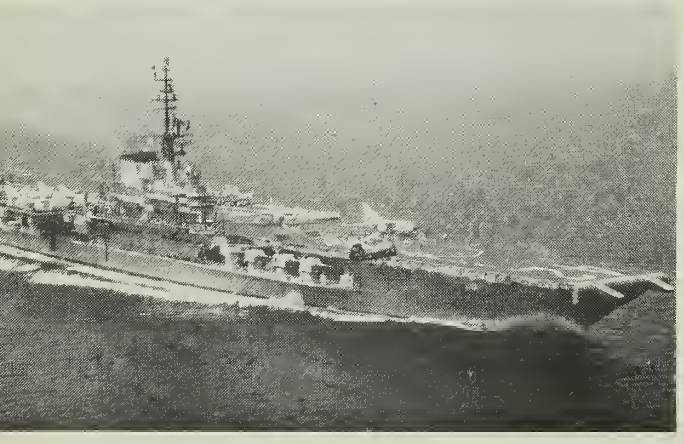
The airlift of maintenance personnel and support equipment was handled by MATS.

★ ★ ★

MORE THAN 10,000 members of the regular and reserve forces of the Army and Air Force figure in recent Defense moves to beef up U. S. combat forces in Europe. As announced by the Department of Defense:

- The 3rd Armored Cavalry Regiment of Fort Meade, Maryland, is being deployed to Europe; it will be replaced at Fort Meade by men of the 150th Armored Cavalry, West Virginia National Guard, who have been ordered to active duty.
- Ten fighter squadrons, one tactical reconnaissance squadron, one tactical control group, and supporting elements of the Air National Guard started deploying to Europe in November. Seven regular Air Force squadrons already in Europe on temporary duty will return to the U. S.
- Several thousand tracked and wheeled vehicles and more than 100,000 tons of equipment for use by armored and infantry divisions are being shipped to Europe and maintained in a state of readiness.





Three-Time Champs

FOR A SQUADRON to win either the Chief of Naval Operations Safety Award or the Atlantic or Pacific Battle Efficiency "E" for any year is quite an achievement. To win both in one year is remarkable.

Fighter Squadron 14 at NAS Cecil Field, Fla., has, however, accomplished this feat in triplicate. The VF-14 *Tophatters* have won both the CNO Safety Award and the Naval Air Force Atlantic Battle "E" for the past three consecutive years.

The mission of VF-14 is to intercept and destroy enemy aircraft at night and during inclement weather. To accomplish that task the unit flies the F3H-2 *Demon* jet fighter, armed with air-to-air *Sparrow* III and *Sidewinder* missiles, backed by 20mm guns.

To win the CNO Safety Award and the Air Force Atlantic "E" in 1959, the *Tophatters* totalled 3348 flying hours and 1204 carrier landings. These were completed during a Mediterranean cruise, a NATO exercise and numerous Fleet operations.

Repeating as a double-winner in fiscal 1960, the unit recorded 4348 flying hours and 2318 carrier landings. They participated in two Fleet exercises, a weapons system evaluation, and a six-month tour with the Sixth Fleet.

VF-14 has again won both awards for fiscal year 1961, while operating with USS *Franklin D. Roosevelt* (CVA 42) in the Mediterranean and participating in a Fleet exercise in the Caribbean. The *Tophatters* flew 4010 hours and made 1867 carrier landings during fiscal year 1961.

Counterclockwise from upper right: (1) An F3H *Demon* is hoisted aboard USS *Franklin D. Roosevelt* (CVA 42) before squadron's departure to Med. (2) *Demon* of VF-14, sporting top hat insigne, flies high while on mission. (3) VF-14 jet comes in during operations in the Med. (4) *Tophatters* were first in Fleet to get *Demons*, shown here at NAS Cecil Field, Fla. (5) USS *Franklin D. Roosevelt* was the home of VF-14 while at sea. (6) Members of "E" winning VF-14 pose for photo.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept. Washington 25, D. C.

Reenlistment Bonus

Sir: In 1951, I voluntarily extended for two years, and received $90. In 1953 I reenlisted for four years, and in 1957 did the same for six years. The personnel office counted the 1957 reenlistment as my second, and I was paid on that basis. Then, a year later, it was determined that it was really my third reenlistment, and my pay was checked for $480.

My question is: Has the Comptroller General since revised his stand on counting a two-year extension as a reenlistment for pay purposes? — A. T., CS1, USN.

- *Sorry, there has been no such CG decision made.*

"NavCompt Manual," Para. 044075, provides that, for the purpose of determining the number of the reenlistment for which the bonus is payable, any reenlistment entered into on or after 1 Oct 1949 for which a reenlistment bonus or allowance was payable will be counted, and that the term "reenlistment" includes a voluntary extension of enlistment for two or more years. — Ed.

Performance and Promotion

Sir: A recent issue of the *Line Officer Personnel Newsletter* contained an article which explained the procedures used by Navy promotion boards. It said: "While each promotion board establishes its own detailed criteria, experience has shown that . . . performance is the primary consideration . . . In summary, the key to a successful naval career is daily performance as recorded in fitness reports . . ." The word "performance" is repeated 15 times in this article.

I have been an officer for three years and I don't know whether my reporting senior considers my performance good or bad. I have never seen one of my fitness reports, nor has there ever been any mention to me of my performance.

Since my superior officers appear reluctant to discuss this matter, how am I expected to know whether or not my daily performance has been satisfactory? — R.L.R., LTJG, USN.

- *You have really answered your own question. The mere fact that you never have been shown one of your fitness reports indicates that your performance is satisfactory. And, since you have not been counseled concerning minor deficiencies in your performance, this further indicates that your superiors think you are doing a good job.*

You don't have to take our word for this. "BuPers Manual," Art. B-2203, requires that an adverse report be shown to you and that minor deficiencies not be included in the report until after they have been discussed with you and you have had an opportunity to correct them.

Although you apparently have no reason for concern, you, and all other officers in the Navy, are encouraged to discuss your performance with your reporting senior. — Ed.

Competent Authority

Sir: Since temporary additional duty orders are issued by designated commands only, may the commanding officer of such a command write TAD orders for himself? It seems to me that his orders would have to be written and signed by a superior officer, but where is this specified in regulations? Disbursing directives specify only that TAD orders be written by "competent authority." How does a CO determine who this competent authority is? — R. J. K., CWO, USN.

- *Your CO may authorize his own TAD. Official orders are issued by title, rather than by name, so it's perfectly proper for a CO, who has authority to issue orders anyway, to issue them to himself. BuPers Inst. 1321.2C, which spells out the issuance of TAD orders for officers, also contains a listing of all commands authorized to write them.* — Ed.

Steel Flight Decks

Sir: I happened to mention one day that the aircraft carrier *Midway* (CVA 41), which I had served in for 18 months, had an all-steel flight deck. This about drove the crew of this ship into a panic. They don't believe me.

Will you please confirm my story and also tell me the names of other aircraft carriers which have similar decks? Also, when were the steel flight decks installed, and with what type of paint are they covered? — R. J. D., BT1, USN.

- *Before the crew elects you president of a shipboard Liars Club, we will confirm your story about the all-steel flight deck aboard* USS Midway.

There are also nine other aircraft carriers which have all-steel flight decks. They are USS Franklin D. Roosevelt *(CVA 42),* Coral Sea *(CVA 43),* Forrestal *(CVA 59),* Saratoga *(CVA 60),* Ranger *(CVA 61),* Independence *(CVA 62),* Kitty Hawk *(CVA 63),* Constellation *(CVA 64), and* Enterprise, *CVA (N) 65.*

These ships were constructed with all-steel flight decks which are kept painted with a non-skid flight deck compound.

Just in case the election is over, you had best resign your seat. Whoever heard of a Liars Club president who was caught telling the truth? — Ed.

AIR RIDE — Navy's new hydrokeel landing craft, which has exceeded 30 knots, skims over the Potomac River during a test demonstration.

RESTING on fantail of *USS Long Beach,* CG(N) 9, is HU-2 copter for which first landing on a nuclear-powered surface ship is claimed.

Air Controlman

Sir: Can you shed some light on the status of the former ACW rating? On 31 Mar 61, all ACWs, ACRs and ACTs were changed to ACs making the rating assigned through BuPers, instead of by EPDOPAC or EPDOLANT.

Those of us who have gone on the Seavey list under Segment Three of 1961 have been left up in the air without any way of knowing when to expect orders or how to express our preference for next duty or school.

Any information you can provide as to what the rotation of the AC rating will be and the method of submitting requests for preference of duty will be appreciated. — R.E.D., Jr., AC2, USN.

- *The Chief of Naval Personnel assumed direct distribution control for the AC rate in the early warning commands on 15 Sep 1961. As you say, ACs are now detailed by this Bureau.*

You can still expect rotation at the end of your regular tour of duty at whatever station you are located unless you have received orders extending your tour. The Bureau has the authority to extend you up to one third of your normal tour of duty. If this happens, you will have received orders to that effect well in advance.

Now, as to the method of submitting requests for preference. AC assignments are made on the basis of information contained on AC Data Cards (NavPers 205) (New 4-56).

In order that the Bureau may have all the information it needs to make its assignments, it will be the responsibility of every AC to submit his card when he reports to a new station and any time a change occurs in his status — such as advancement, new qualifications or change of duty preference.

All commands concerned have been advised of the need for data cards. By the time you read this, they will undoubtedly have been issued. — Ed.

Elizabeth and Kitty Hawk

Sir: In the June issue of All Hands your article on USS *Kitty Hawk* (CVA 63) said it was the largest ship afloat and gave its gross tonnage as 80,000 tons. To the best of our knowledge, SS *Queen Elizabeth* has a gross tonnage of 83,634 tons.

Although *Queen Elizabeth* is 16 feet shorter, it seems to us that she is still the largest ship afloat. Any comment? — G.R.H., EM2, USN.; J.D.P., EM2, USN.; G.D.G., IC2, USN.

- *Comparing tonnages and measurements, we have found, can be a tricky business when the figures don't come from the same source.*

Queen Elizabeth *was not in port, so we were unable to weigh the water she displaced. Comparing a couple of sources, we find she probably displaces more than* Kitty Hawk.

We equipped our editor-in-charge-of-tape measures with a tape measure and sent him out again to measure Kitty Hawk. *His conclusion, however, (making corrections for shrinkage of the tape measure) was that* Kitty Hawk's *external measurements (over-all length 1047½ feet, extreme beam 252 feet) are still greater than those of* Queen Elizabeth *(length 1031 feet, width 118 feet seven inches).* — Ed.

The Blue and Gold

Sir: *Uniform Regulations* states that a gold rating badge and service stripes must be worn on the blue jumper by those who meet the eligibility requirements. Does this include both dress and undress blue jumpers? — J.B.S., YN1, USN.

- *Yes. If you are eligible to wear gold, it must be worn on both the dress and undress blue jumpers. You must also wear the gold rating badge on the sleeve of your pea coat without service stripes.* — Ed.

The Story of Dr. Wassell

Sir: The other day during a discussion with someone here in London, I may have told a story that is not exactly correct.

My knowledge of history and geography is something less than adequate, but here is the story as I remember it and as I told it to my British friend. Can you verify it or correct me where I'm wrong?

During the early part of World War II, as I recall, a U. S. Navy Medical Corps officer by the name of Wassel (possibly spelled Wassal) was responsible for the evacuation of numerous wounded men from Malaya, Singapore or some other Asiatic-Pacific area.

I believe Dr. Wassel was attached to a British unit or serving with an organization under British command. This officer, I think, over the vigorous protests of certain higher authority, refused to abandon the wounded, and after a successful evacuation caused by his actions, was awarded the Medal of Honor.

He retired in Little Rock, Ark., after World War II, and I seem to remember that a film of his exploits was made and a novel of his life written. I think he died in either 1955 or 1956.

How nearly correct am I? — T.S.G., YN2, USN.

- *Your story is pretty close to the facts.*

As we have it, Dr. Wassell (with two "l's") was in Java, Netherlands East Indies, when the evacuation to which you refer was accomplished about 1 Mar 1942. For his courage and accomplishment he was awarded the Navy Cross, not the Medal of Honor.

Dr. Wassell's story was told once by the late President Franklin Delano Roosevelt during one of his Fireside Chats. President Roosevelt said in a radio address on 28 Apr 1942:

" . . . I should like to tell you one or two stories about the men we have in our armed forces: There is, for instance, Dr. Corydon M. Wassell. He was a missionary, well known for his good works in China. He is a simple, modest, retiring man, nearly 60 years old, but he entered the service of his country and was commissioned a lieutenant commander in the Navy. Dr. Wassell was assigned to duty in Java caring for wounded officers and men of the cruisers Houston *and* Marblehead, *which had been in heavy action in the Java seas.*

"When the Japanese advanced across the island, it was decided to evacuate as many as possible of the wounded to Australia. But about 12 of the men were so badly wounded that they could not be moved. Dr. Wassell remained with these men, knowing that he would be captured by the enemy. But he decided to make a desperate attempt to get the men out of Java. He asked each of them if he wished to take the chance, and every one agreed.

"He first had to get the 12 men to the sea coast 50 miles away. To do this, he had to improvise stretchers for the hazardous journey. The men were suffering severely, but Dr. Wassell kept them alive by his skill, and inspired them by his own courage. As the official report said, Dr. Wassell was 'almost like a Christ-like shepherd devoted to his flock.'

"On the sea coast, he embarked the men on a little Dutch ship. They were bombed and machine-gunned by waves of Japanese planes. Dr. Wassell took virtual command of the ship, and by great skill avoided destruction, hiding in small bays and inlets. A few days later, Dr. Wassell and his little flock of wounded men reached Australia safely. He now wears the Navy Cross . . ."

At the time the Java evacuation began, Dr. Wassell was a lieutenant commander in the Naval Reserve, assigned to duty as medical officer in command, U. S. Naval Activities, Surabaja, Java. He was furnished support in the evacuation from the Dutch Naval Liaison Officer there.

When Dr. Wassell entered the Naval Reserve in 1924, it was as lieutenant junior grade. At the time he first accepted his commission, he was serving in China as a medical missionary with the Episcopal church.

During some 14 years in China, Dr. Wassell performed numerous services. He was in charge of the Chinese National Red Cross in 1918 and of the International Red Cross medical relief effort during the Han River levee break and famine of 1921. He was professor of medical parasitology, Hale-Hunan Medical College, Changsha, China, 1920-1922. He was Port Medical Officer and Chinese Maritime Medical Officer at Kiukiang, 1923-1927, and from January to April 1927 served on active duty (without pay) with the U. S. Navy's Yangtze Patrol.

Dr. Wassell was appointed LTJG in the Medical Corps of the U. S. Naval Reserve in September 1924, and was promoted to lieutenant on 9 Apr 1926. He subsequently attained the rank of captain to date from 20 Jul 1943, and was transferred to the retired list of the Navy on 1 Aug 1946 as a rear admiral. He died at Little Rock on 12 May 1958.

After Dr. Wassell returned to the United States in 1942, he toured the country, speaking at war plants to stimulate production. Despite occasional ill health, Dr. Wassell spoke to well over a million workers in more than 500 appearances during the war years.

The movie of which you speak was produced in 1944. It was titled "The Story of Dr. Wassell." It premiered in Washington, D.C., in April 1944. James Hilton also wrote a book entitled "The Story of Dr. Wassell." It was published in 1943. — Ed.

ON THE LINE — Local citizen is highlined from *USS Forrest Sherman* (DD 931) during guest cruise off Abidjan, Republic of Ivory Coast.

About Alameda County

Sir: It seems your fine magazine has been guilty of oversight in your article on uss *Alameda County* (AVB 1). It does not credit *Alameda County* with all her duty in the Mediterranean.

Alameda County's first change of home port was in June 1953 while she was still LST 32. She left CONUS on 4 Sep 1953 for Mediterranean duty. She went directly from Norfolk, Va., to a small town in Crete for the first advance base operation.

It wasn't until after this operation that LST 32 went to Naples, Italy. She arrived there on 14 Oct 1953, which was before she received her present name and was redesigned AVB.

In March 1955, *Alameda County* returned to the United States and was converted to AVB 1.

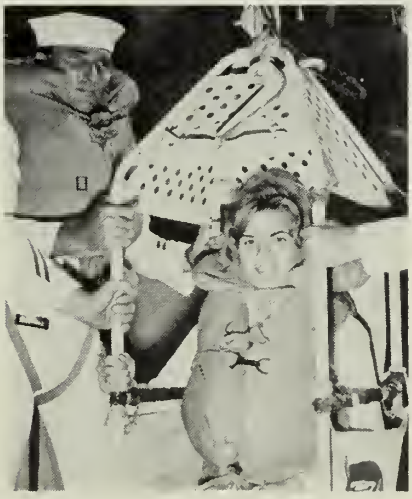
I believe she was the first ship to carry construction equipment to Spain for the construction of the Rota base. I also believe she may have remained overseas longer than any other ship in modern times. — H.E.W., YN2, usn.

- *Right you are, in part. An investigation of* Alameda County's *girlhood reveals the facts of her early life are as you have outlined them.*

We are unable to obtain satisfactory confirmation of her part in the construction of the Rota base, but as regards your last statement, we can think of two ships that exceeded Alameda County's *overseas stint.*

uss Des Moines *(CA 134) was deployed as Sixth Fleet flagship in the Mediterranean for 33 consecutive months. She returned to the United States in March 1961 after some 37 months in Mediterranean waters.*

The Des Moines' *record was exceeded by* uss Augusta *(CA 31) which was deployed to the Asiatic Fleet as flagship in 1933 and returned to the United States in November 1940.* —Ed.



ALL SET—Miss Bambi Shawkey is about to be highlined from *USS Turner* (DDR 834) to *USS Goodrich* (DDR 831) during a family cruise.

AIR MAIL — VP-19 plane from NAS Alameda, Calif., makes weekly airdrop of mail to Radar Picket Squadron One operating at sea.

Ships Without Names

SIR: The other day I was reading about the *YW 105* in ALL HANDS and I remarked to one of my shipmates that I had served aboard that ship back in 1946.

He asked me the name of the ship and I explained that it had no name. He insisted that all ships have names. Now he has me wondering if maybe I am wrong. Do all Navy ships have names?

We have lots of time to think about things like this where I am stationed. I am on an island two miles off the Naval Station at Argentia, Newfoundland, and our only transportation is by boat or helicopter.

I am one of four men assigned to this island. We take care of the lighthouse and fog horn. We actually stay aboard one month and then get a week of liberty. This leaves three men aboard at all times.

It isn't bad duty. We have a house with kitchen, dining room, living room, three bedrooms and a pantry. We have an engine house with two engines for the fog horn. We also have a generator for electrical power.

When we get food and supplies, we rig a highline from the boat up the rocks to the house. We have top priority on food and steak is our favorite. We also cook our meals out here. — T.R., Jr., BM3, USN.

• *Your friend has something to learn about the Navy. There are many U. S. Navy ships that are not named and the YW 105 is one of them. Others include AFD (auxiliary floating dock), APL (barracks craft), LCU (landing craft, utility), MSB (minesweeper boat), YC (open lighter), YDG (degaussing vessel), YFU (harbor utility craft), YMS (auxiliary motor mine sweeper), YP (patrol craft), and YTL (small harbor tug).*

Until six years ago LSTs were not named. They are now named for counties in the United States, but before 1955 they had numbers only. Perhaps in the years to come all ships will have names, but now many do not.

Your duty assignment sounds interesting. We suspect you don't have any trouble getting to work on time in the morning. — ED.

Selection for LDO

SIR: I took the battery test for LDO last June, and my formal application for the program was sent in the following month. I understood that the Selection Board would meet sometime last fall (October or November) and that successful candidates would be notified, while unsuccessful candidates would not be.

Is there an approximate scheduled date for this notification? I hate to be left hanging in mid-air, so to speak. — J.T., CS1, USN.

• *The LDOT selection board met in November. Names of selectees will be published in a BuPers Notice to all ships and stations, probably during this month. The same Notice will also contain all information available at the time, pertaining to appointing dates and dates of rank. If your name does not appear in that Notice, you'll know you are not selected. Meanwhile — good luck.* — ED.

LDO Retirement

SIR: I was appointed LTJG under the program available to CPOs completing eighteen and one-half years of naval service under Title 10, U. S. Code 5596.

I have been under the impression that LDOs could revert to their permanent enlisted status for purpose of transfer to the Fleet Reserve and, after 30 years of service, be advanced on the Retired List to the highest grade held, thereafter receiving pay and allowances of that grade.

Recent discussions have cast doubt on the accuracy of this information and I have been unable to confirm or refute it definitely. I have been given to understand that I must serve 10 years in commisioned status to retire as an officer. — F.V.M., LTJG, USN.

• *If you have completed more than 20 years of active duty (including active duty for training), 10 years of which have been commissioned service, you may request to be transferred to the retired list in an officer grade.*

This applies to any naval officer, including an officer holding a temporary appointment with permanent enlisted status. His transfer has to be at his own request and it is made at the discretion of the Secretary of the Navy.

A permanent enlisted man serving under temporary appointment in a warrant or commissioned grade may, upon application therefor to the Secretary of the Navy, have his temporary appointment terminated and be transferred to the Fleet Reserve, providing, of course, he has completed the required service for such transfer.

An enlisted man, after completing 19½ years of active service, may be transferred to the Fleet Reserve in the enlisted grade which he held at the time of transfer.

He will then be transferred to the retired list after completing 30 years of combined active and inactive duty.

If he is found to be physically unable to perform the duties of his enlisted grade while a member of the Fleet Reserve, he may be transferred to the retired list when such finding is made.

If the Secretary of the Navy determines that a man has served satisfactorily under a temporary appointment to a warrant or commissioned grade, he will be advanced on the retired list to that grade effective from the date of transfer to the retired list. His retired pay will be computed on the applicable basic pay of the grade to which advanced. — ED.

Promotion Zone for LDO

SIR: I have several questions concerning the selection of limited duty LTJGs for promotion to LT. I was selected for LTJG from Chief Warrant Officer. My date of rank is 1 April

1960. Will I be considered for selection? Will other ex-CWOs with the same, earlier, or later date of rank be actively considered? How many LDOs will be selected to fill LT vacancies for the present fiscal year? — P. V. H., LTJG, USN.

- *You were not eligible for promotion in fiscal 1962. The promotion eligibility zone ended with an LTJG date of rank of 31 Dec 1959. By law, there is no below-promotion-zone eligibility for LDOs. Of the 466 LDOs eligible for promotion to LT this year, 459 were selected.* — Ed.

Going Into Fleet Reserve

Sir: In your August 1961 issue, you state that after a date has been set for transfer to the Fleet Reserve, a man may request transfer to a duty station close to his legal residence to complete the final months of his service. This, as I understand it, is to allow him some time to do some "job-hunting" before retirement.

The personnel office at my activity hasn't gotten the word on this. Could you tell me the authority for such a request, and how such a request should be submitted? — E. D., BMC, USN.

- *In the past, the Chief of Naval Personnel has authorized certain enlisted members of the naval service, who were in receipt of "Authorization for Transfer to the Fleet Reserve (NavPers 631)," to be transferred to a separation activity of choice 30 to 45 days in advance of the effective date of transfer to the Fleet Reserve (30 days if in CONUS; 45 days if overseas or deployed outside CONUS).*

Such a transfer was contingent upon the member's selecting the specific area as a permanent home after transfer to the FR was executed, and provided that the home of selection was in the same metropolitan area as the separation activity.

The entire concept of the early transfer is aimed at personnel who are on sea duty and must be transferred to a separation activity in CONUS for the necessary processing incident to transfer to the FR, and is granted to assist such personnel in the transition to civilian life. Personnel on shore duty are generally in a more favorable situation for establishing post-service employment than those on sea duty; however, every consideration is given their desire for early transfer.

Since these requests are individual special requests, there is no written directive or "authority" applicable. Your request may be addressed to the Chief of Naval Personnel (Pers B221), via the appropriate EPDO. Each case is considered on its own merits, and in light of such factors as: Will the best interests of the Navymen and the government be served; are facilities for effecting payments and for conducting separation physical examinations incident to separation available at the temporary duty station? Small activities, such as recruiting stations, Naval Reserve training centers, etc., are not considered suitable for separation purposes, and requests for separation at these activities are disapproved. — Ed.

PERSONNEL of Patrol Squadron 56 learn survival-at-sea techniques during drill in 12-man life raft.

Recollections of the Sea-Going Life Strike a Nostalgic Cord

Sir: Here's a letter from my files. All I want to say is that here, in this letter, is expressed much of what all of us who follow the sea must feel. — W. R. Smedberg, III, VADM, USN.

- *We believe this letter may be similar to what most of us have thought and what some of us have written in our own letters. Here it is.* — Ed.

"I am sitting here, my last night on board my ship, and thinking back over some of the things I have loved about this Navy and what it has meant to me. I am writing it down because I never seem to be able to say what I mean about it to anyone, without a feeling that I'm being sort of armchair-admiralish about it — you know, over a drink, late at night — far from the whole atmosphere of it. It seems so much easier here in the silence of the ship — the silence that is filled with the gurgle of the water under the hull, the thump of the pumps in the engine rooms, the hum of myriad blowers, the sudden slamming of watertight doors and the babble of voices in passageways — this is the silence that I know — the silence of the ship. At sea it was much the same — only louder — with the added rush of the waves and the occasional thunder when a big roller washed against the deckhouse — a louder silence.

"I think back to the friends I have known here in the ship — almost all of them having one thing in common —the ship. It's funny how these people have come and gone, and yet left very little change in the personality of the ship itself. The captains have made a difference, of course, but not too much when you come right down to it. The ship will continue to operate when the turnover is complete; the guns will fire, the great propellers will push it through the water, the radios and signal lights will convey essentially the same messages — some urgent, some routine, some very official and cold, some very soft and sad. She will not notice my passing any more than she has noted any other's passing. And yet the ship has wrought a change in me, I suppose, and I wonder what it is. Is it a feeling, a new feeling, of self-confidence? Is it a quality of leadership that has been added? Is it a great host of experiences in living and dealing with men? Is it the increase in worldliness because of a few thousand miles of ocean and foreign soil — is that enough to make a man worldly? I wonder if it wasn't the feeling of adventure — the roll and heave of the deck, the added responsibility of guiding a ship of war through complicated maneuvers, the exhilaration of shooting down a sleeve, or the feeling of "Thank-God-that's-over," when the long hours on the forward fueling station were over and a hot cup of coffee awaited.

"Some of the great opportunities were absorbed. The big seaports; the museums; the great sights of the Mediterranean world; I saw some and missed some. The great sea itself—calm and profound at one minute, tumultuous, roaring, destructive the next—always beautiful, always mysterious—sometimes an enemy more real than sunlight, sometimes a friend, a shoulder to lean on and think — I know I will miss all of the things I've grown so used to, but I hope not for long.

"I now leave the ship for good. I'll miss a lot. I'll miss leaning over the bullnose and watching the bow cut smoothly through the water. I'll miss the ship—I don't know if you understand what I feel, but maybe when we get together I'll be able to tell you more."

Missouri in Korea

Sir: I have read several conflicting accounts of the role of USS *Missouri* (BB 63) in the Korean campaign, particularly (1) whether or not she ever anchored at Inchon Harbor, and (2) how many tons of ammo she expended. —E.E.T., EN2, USN.

- Missouri *saw a lot of Korean action between September 1950 and April 1953. One of our statistical experts states that she steamed more than 80,000 miles and bombarded the enemy with nearly 8000 tons of ammunition.*

Most of Big Mo's *service was off Korea's east coast. She did make one mission to the west coast, however, when early in 1953, while operating with the British cruiser* Birmingham, *she bombarded enemy installations north of the UN battleline. During this cruise she also anchored for five hours in Inchon Harbor, the scene of a meeting between U. S. military commanders. "Way Back When" page 51, has more on* Missouri. —Ed.

Reassignment of PCs

Sir: When I came ashore in August 1960, I was a YN3 and had a Navy postal clerk NEC. In November 1960, I was selected as a postal clerk and became a PC3.

I am still serving in a yeoman billet in this unit. In my opinion, this is not in the best interests of the Navy.

I am probably not the only PC in this predicament, but I feel that we, as PCs, are not being utilized in the way the Navy intended. Why should I be kept in this YN billet when there are probably many yeomen who are filling PC billets?

If I am reassigned to a PC billet before the end of my normal tour of shore duty, will I be reassigned ashore or will I be sent to sea? My shore duty tour as a yeoman expires in September 1963. —S.J.W., PC3, USN.

- *You will probably remain in your present billet for the remainder of your normal tour of shore duty. In other words, you will be assigned to sea duty in 1963, just as you would have been as a yeoman. The difference, of course, is that you will be reassigned to a PC billet.*

For the most part, PCs are being phased into postal clerk billets as they become eligible for normal rotation. A few will, perhaps, be reassigned in the middle of a tour, but only in unusual cases. Whether or not these few would be reassigned ashore or be sent to sea duty would depend on the special circumstances in each case.

We have been told that some PCs are being given intra-command transfers to postal clerk billets. If some YN3 is filling a PC billet aboard your station, perhaps you can swap.

You asked why you should remain in a YN billet when perhaps there are many yeomen in PC billets. Money is perhaps the biggest and best reason. As you probably know, the Navy has been short of transfer funds for some time. Because there are such a large number of individuals in the new PC rating, reassignments are, in most cases, being made concurrent with an individual's normal rotation. —Ed.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Arizona* (BB 39) — A memorial reunion has been scheduled for 21 April at the Lafayette Hotel, Long Beach, Calif. For details, write to Joe Keehen, 811 Locust Ave., Long Beach 13, Calif.
- *LCI (L) Flotilla II* — All who served in the European theater during World War II are invited to the reunion to be held 16-19 August at the Hotel Sheraton Gibson, Cincinnati, Ohio. For more information, write to Paul Carter, 804 — 4th Ave., Iowa City, Iowa.
- *64th Seabees* — The third annual reunion for those who served during World War II is scheduled for 10-12 August at the King Edward Hotel, Jackson, Miss. For additional information, write to W. R. Brown, 1955 Wingfield Circle, Jackson 3, Miss.

More Rig Time

Sir: Less than a month after assuming duties as flagship for COMCRUDIV 2 in the Sixth Fleet, our fuel gang on board USS *Newport News* (CA 148) twice broke the record cruiser fuel rigging time, which had been established by USS *Little Rock* (CLG 4).

First, while steaming alongside USS *Nantahala* (AO 60), we sent the first messenger over and 5.2 minutes later were receiving fuel both fore and aft. Then, less than two weeks later, we chopped off another minute by doing it in 4.1 minutes. —The Crew, USS *Newport News.*

- *Your time is good, but it's not the best ever (see the November issue, page 26). It is, however, the best cruiser rig time we've received so far—so, until we hear otherwise, we'll go along with your claim that* Newport News *in the riggingest CA afloat.*—Ed.

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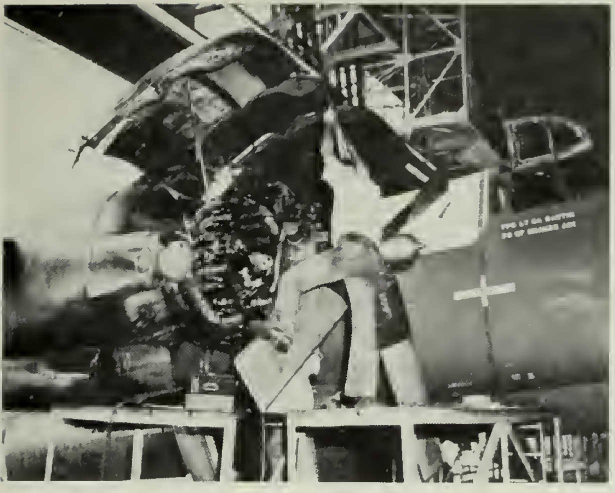


At Peak Readiness

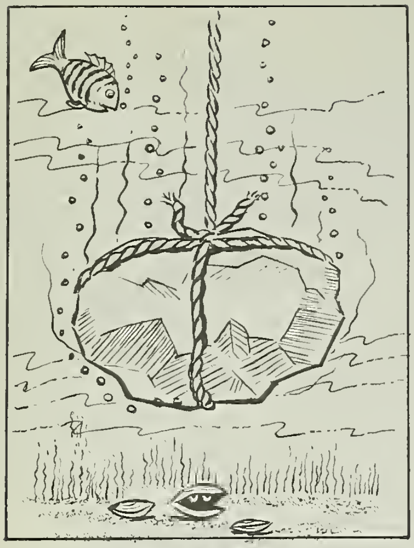
PILOTS OF PATROL and reconnaissance squadrons rack up many flying hours and – at the same time – create steady work for the ground crews who maintain their aircraft.

The three squadrons which make up Fleet Air Wing Six are typical.

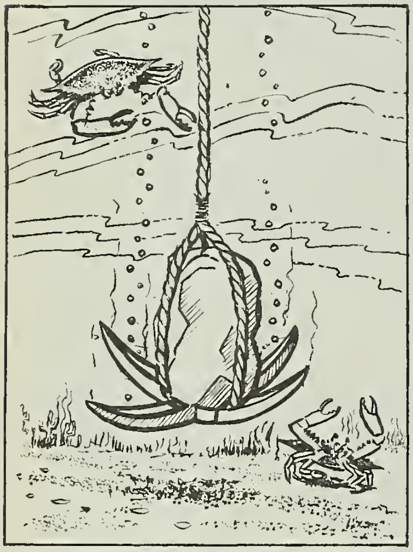
Operating from the Marine Corps Air Facility, Iwakuni, Japan, units of FAW-6 patrol the seaways and coastlines throughout that area.

Personnel of FAW-6 are trained in precision operating efficiency and strive to keep the squadrons at peak readiness at all times.

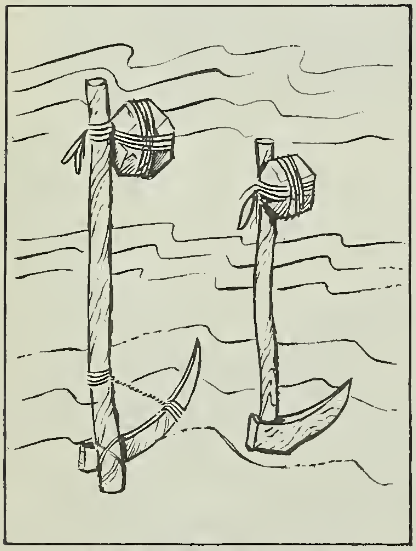
Clockwise from upper left. (1) J. P. Strider, AD1, USN, pulls a pre-flight check on a P2V *Neptune* of Patrol Squadron 28. (2) Members of Patrol Squadron 50 secure buoy lines to a P5M *Marlin* while under the watchful eyes of LTJG P. J. Wist, USN. (3) JATO bottles, used to assist in takeoffs, are on-loaded for next run by R. A. Lungenbel, AD2, USN, and E. L. Howe, ATC, USN. (4) A P5M-2 *Marlin* is beached for parking while a construction worker repairs ramp. (5) Beach crewmen of Patrol Squadron 50 stand by with a fire bottle while P5M-2 *Marlin* is warmed up.



STONE ANCHOR



PRIMITIVE ANCHOR



EAST INDIAN ANCHOR

STORY O

ANCHORS OF OLD

Few people who see an anchor stop to think of its origin and its evolution. We might find it interesting, however, to visualize a Stone Age man casting the first anchor from his wooden dugout. Without knowing what motivated his new creation, he was a thinking man of his time.

Many forms of anchors were used by the ancients. The earliest consisted of stones which acted merely as weights without hooking into the bottom. Later, wooden hooks were added to the stones. One-armed hooked sticks, weighted to make them sink, were also used.

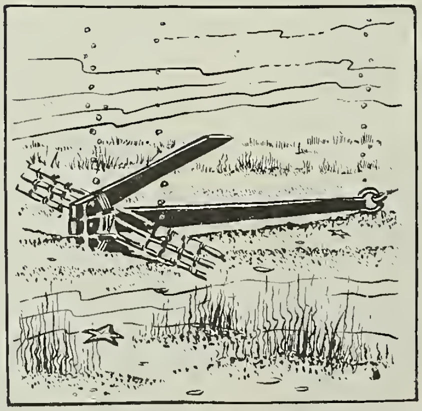
With the advent of the Chinese or Malayan type anchor, a second arm was added. This type of anchor, in existence about 2000 B. C., is still used to hold Chinese junks. It has a stock or crosspiece at the rear and somewhat resembles the modern grapnel.

The earliest recorded use of anchors was by the Egyptians on their Red Sea galleys, while the Greeks are credited with having used the first iron anchor.

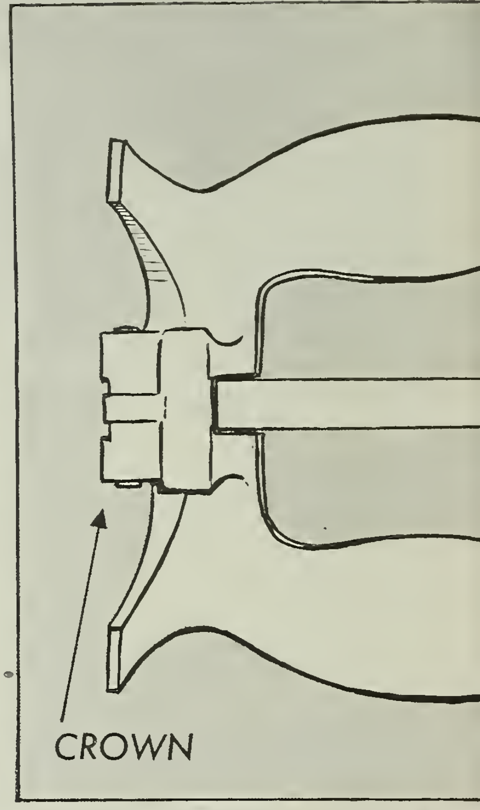
STOCKLESS ANCHOR

The stockless or "patent" anchor was developed in England, a British patent having been issued in 1821. This is an anchor with which we are all familiar, since it is used on all the larger ships in the U. S. Navy today. It is used on most men-of-war, primarily because of its suitability for stowage and its convenience in handling.

The stockless anchor does not have as much holding power as an "old-fashioned" anchor of the same weight or of the same fluke area (which is a better measure of holding power than weight). With too short a scope of chain, or even under a steady pull, a stockless anchor has a tendency to disengage its flukes by gradually turning them over and rolling them out. It also has a tendency to cloy or ball with mud on a muddy bottom. If this occurs, and the anchor breaks out, the arms may pivot to an angle where it is impossible for the flukes to bite again, and the anchor can offer no resistance to dragging except its weight.



CHINESE ANCHOR



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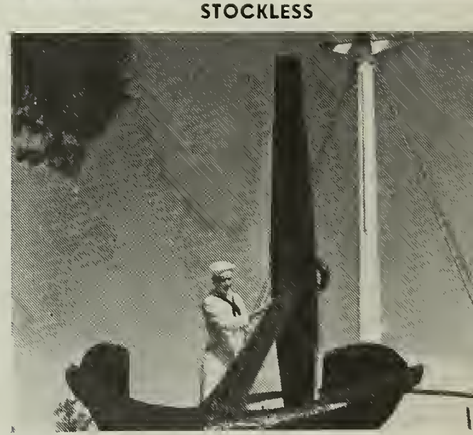
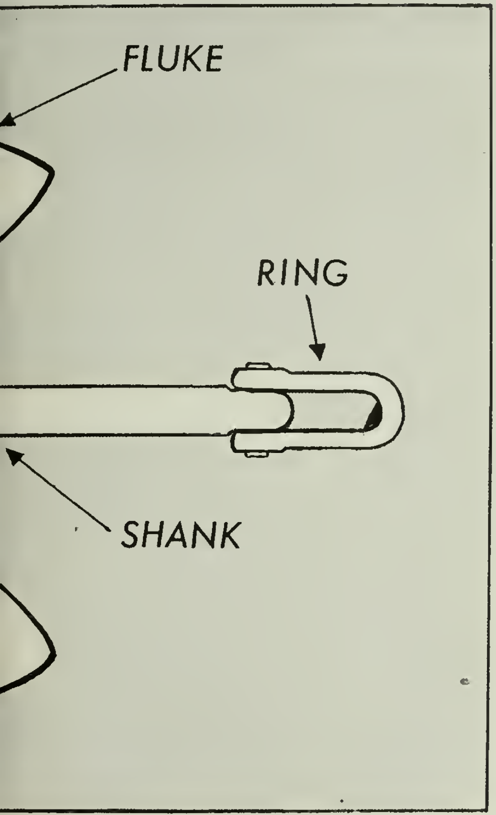
STOCKLESS



OLD ANCHOR

Prepared by ALL HANDS Magazine

ANCHORS



NCHOR

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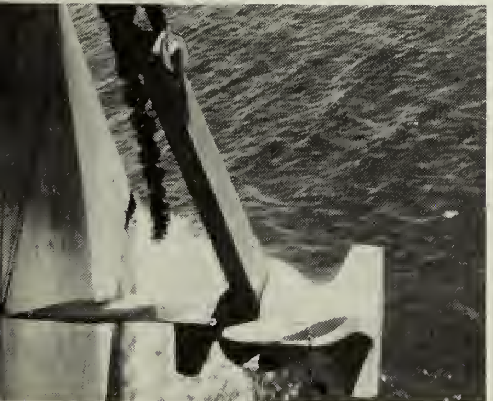


NEW ANCHOR

ANCHORS OF TODAY

To the right are types of anchors, all of which are in use today.

The "common" or "old-fashioned" type anchor has been used since 750 B. C., and is designed on the same basic principle as the Chinese or Malayan type. However, it has the stock, or crosspiece, at the forward end. In the early days, this type of anchor was usually made by forging with heavy hammers, and many defects occurred.

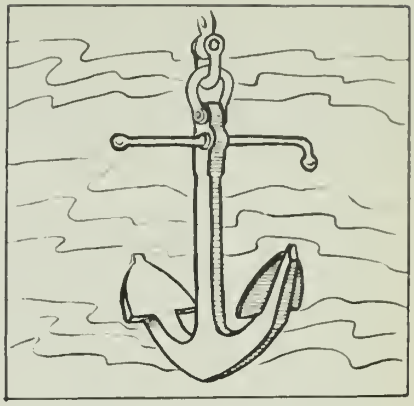
Many experiments have been made to overcome the disadvantages of the stockless anchor, while preserving its handiness. Some of the best results obtained are found in the design of the Danforth anchor, which is rapidly coming into use for many types and sizes of shipes. Under a steady pull, it shows a tendency to bury itself deeper in the bottom, as the old-fashioned anchor does, and it will not roll like the stockless. In fact, the difficulty involved in breaking it out before getting underway may be a disadvantage.

It is claimed that this anchor has about three times the holding power of an old-fashioned anchor of the same weight, and around 10 times the holding power of similar stockless anchors of the conventional type. The Danforth anchor was used extensively during World War II for landing craft, seaplanes, ships and moorings.

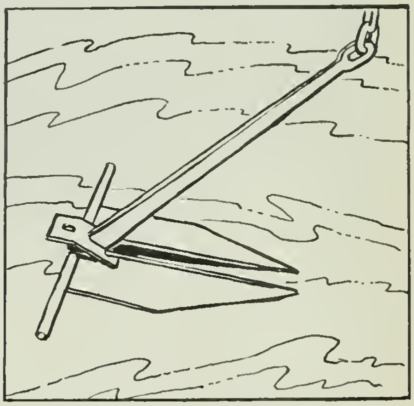
Mushroom anchors derive their name from their shape. This type of anchor has a shank built solidly at right angles to the rounded part, which is slightly cupped to give it a biting edge. A cant in any direction will cause the edge to bite, with a tendency to bury itself in the bottom. Mushroom anchors are usually heavy, and are commonly used for such purposes as moorings for buoys and in salvage operations.

An anchor which is used in England, but is uncommon in the United States is the plow anchor. It was patented in 1933, and is used on smaller craft.

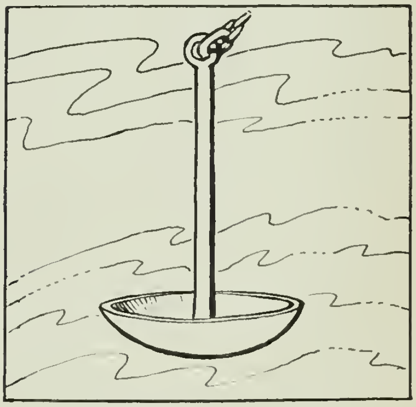
The screw anchor is a large, sharp-pointed screw with a broad flange. It is used principally for mooring.



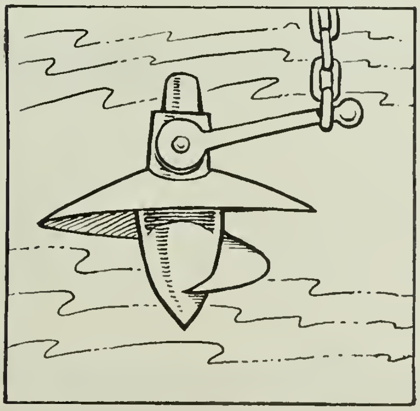
OLD FASHIONED ANCHOR



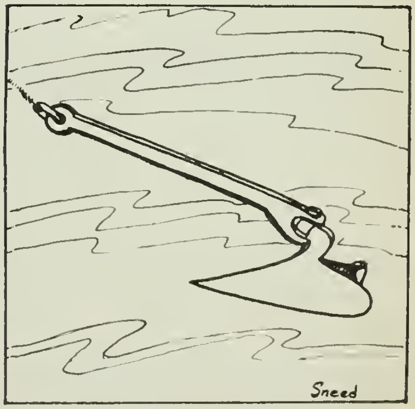
DANFORTH ANCHOR



MUSHROOM ANCHOR



SCREW ANCHOR



PLOW ANCHOR

TODAY'S NAVY

BROADSIDE VIEW — Under way on one of her assignments as a unit of the U. S. Sixth Fleet in the Mediterranean is *USS DuPont* (DD 941).

Sellers Is Commissioned

USS *Sellers* (DDG 11), the Navy's latest addition to its ranks of guided missile destroyers, has been commissioned at the Boston Naval Shipyard. Ahead are some six to seven months of fitting out and initial training, after which she is slated to operate out of Norfolk, Va., with Destroyer Squadron 18.

Sellers will help beef up DESRON 18's antisubmarine warfare capabilities with all of the now-standard DDG equipment — *Tartar* and *Asroc* missiles, ASW torpedoes and five-inch — 54 dual-purpose guns, plus long-range detection and tracking equipment.

Manned by a crew of 340, *Sellers* is the first ship named for ADM David Foote Sellers, USN, whose assignments during more than 48 years of naval service included those of Commander-in-Chief, U. S. Fleet, and Superintendent of the U. S. Naval Academy.

Four New Names in Navy

Three Fleet ballistic missile submarines and a light cargo ship, now being built, have been named.

SSB(N) 624 will be USS *Woodrow Wilson*, SSB(N) 623 will be *Henry Clay*, SSB(N) 626 will be *Daniel Webster*, and AKL 17 will be *New Bedford*.

Woodrow Wilson and *Henry Clay* will be commissioned late in 1963, and *Daniel Webster* is scheduled to be commissioned early in 1964. No scheduled commissioning date has been published for *New Bedford*.

YESTERDAY'S NAVY

In January 1855 Lieutenant C. Ringgold completed a surveying expedition covering the Bering Strait, North Pacific and China Sea. On 2 Jan 1794 the House of Representatives resolved that a naval force adequate to protect U. S. commerce from Algerian corsairs should be provided. On 20 Jan 1914 the first naval air station was established at Pensacola, Fla., with personnel and equipment from Annapolis. On 25 Jan 1898 *USS Maine* arrived in Havana for the visit that ended in a disastrous explosion three weeks later.

Constellation Is Sea-Ready

A new constellation has made its appearance — not in the sky but on the sea. The Navy's big CVA-64 (see inside front cover) which is scheduled to be sea-ready this month, is the beneficiary of the experience garnered from the construction of all the *Forrestal*-class carriers which preceded her. Her tremendous firepower — her planes and missiles — is reflected in her enormous size.

Constellation, like other ships of her class, ranks among the largest in the world. Her length equals the height of an 80-story building. Her height from keel to mast is that of a 25-story building.

Her other statistics are just as impressive. For instance, her flight deck covers 4.1 acres. She was built with 57,615 tons of steel, which took two million pounds of metal to weld together. Her two anchors weigh 30 tons each.

She can carry her crew of from 4100 to 4600 any place in the world at a speed of more than 30 knots. Her men will consume about 13,000 meals daily, and use much of the 280,000 gallons of fresh water which can be produced each day aboard ship.

Each bunking area of the ship has its own recreation space. The ship's air-conditioning plant is capable of cooling two buildings the size of the Empire State building.

Constellation's bigness is, of course, the reason she is able to carry the large swarm of planes which represents the bulk of her firepower.

Here is a catalog of the big ship's air power and what each plane can do.

First the jets:

The A3D *Skywarrior* was designed as an atom bomber, but it can also carry almost any weapon in the Navy's arsenal. In addition, it can be converted into a high-speed jet tanker for in-flight refueling.

The A4D-5 *Skyhawk* is a small attack plane which can be armed with nuclear bombs, rockets, guided missiles and machine guns.

The F3H *Demon* is a single-place, general-purpose jet fighter. It is designed for fast, all-weather Fleet operations, and can carry heavy loads in several combinations – missiles, rockets, bombs, fuel tanks and miscellaneous stores.

Constellation also carries propeller-driven planes.

The TF-1 *Trader* is used for transporting supplies and personnel.

The AD *Skyraider* is probably the most powerful single-engine airplane in existence, as well as being the world's most versatile combat aircraft. It is known as the work horse of the Fleet with good reason, because it can be used for almost any mission – from serving as an ambulance plane to an atomic bomber. It has terrific maneuverability, and its range exceeds 1500 miles.

The WF-2 *Tracer* is a twin-engine plane that carries a beetle-like shell above it, full of radar equipment which extends *Constellation's* radar net far beyond the capability of the ship's equipment.

To ward off air attack, *Constellation* is armed with *Terrier* missiles. She carries four fire control units and two dual launchers.

The *Terrier* system automatically selects, sets up and launches a missile within a few seconds. After launch, the missile rides a radar beam to destroy its target, regardless of weather, and without the altitude and range limitations of conventional weapons.

No Skating on This Pond

The U. S. Antarctic Research Program has yielded some strange discoveries over the years. Few have been more fascinating, however, than one of the most recent finds – a shallow pond of water in southeast Victoria Land which apparently doesn't freeze over, even during the bitterest Antarctic winters.

Water in the 200-by-700-yard pond (located some 80 miles south of McMurdo Sound) is extremely saline – approximately 11 times as salty as sea water. Indications are strong that this briny water remains unfrozen throughout the year in an area where the annual mean temperature is about zero degrees Fahrenheit and where winter temperatures sometimes drop to 50 below and lower. Since the high concentration of salt necessary to keep water from freezing at those temperatures would be so great as to crystallize, it is felt that there must be other minerals, besides salt, in the pond.

The salty discovery was made last September from a U. S. Navy helicopter flying a scientific reconnaissance mission over Wright Valley. First man to visit the site was Dr. George H. Meyer, a wintering-over microbiologist from the University of Texas.

Dr. Meyer found that the average depth of the pond is only four inches, though numerous small depressions, up to 12 inches deep, were found on the south sides of the many boulders that dot the pond's surface. Old beach lines and other markings, however, suggest that the pond may once have been as much as 30 feet deep.

When first measured, the temperature of the water in the pond was minus 12 degrees – slightly colder than the air temperature at that time. There was no sign of any ice formation on the water. Dr. Meyer has since demonstrated in the laboratory that water from this pool will not freeze even at temperatures as low as minus 60 degrees, Fahrenheit.

Further studies are being made in an attempt to isolate whatever microorganisms might be present in the water, to identify the exact salts present, and to determine the age of the water. They may also furnish some clue as to the riddle of the pond's existence in the area.

Largest Barbecue Afloat

While operating in the Mediterranean Sea one balmy Sunday afternoon recently, the heavy cruiser USS *Newport News* (CA 148) had her fantail changed from a helicopter landing area to a setting for lively music and charcoal steak with all the trimmings.

Choice beefsteaks, broiled over charcoal, were served with oven-baked beans, potato and macaroni salad, hot rolls and chocolate cake. The COMCRUDIV TWO band provided music for the affair.

The largest turnout for a single meal in *Newport News* history expressed the crew's enthusiasm for the event – 2400 meals were served to a crew of 1500. Following the steak feast a movie was shown on the fantail.

The next day *Newport News* returned to normal – meals in the mess hall and operations with the U. S. Navy's Sixth Fleet.

FANTAIL FEAST — In the Mediterranean Sea, the crew of *USS Newport News* (CA 148) gathers for meal featuring charcoal-broiled beefsteaks.

IN MEMORY—Architect's drawing shows ADM King school in Ohio.

His Hometown Honors Fleet Admiral King

A four-and-a-half million dollar high school has been dedicated in Lorain, Ohio, to the memory of the late FADM Ernest J. King, USN, World War II Chief of Naval Operations.

Lorain, a busy industrial community with a population of 70,000, was FADM King's birthplace. He was valedictorian of the class which graduated from Lorain High School in 1897.

The new Admiral King High School contains 239,048 square feet and has a 2000-student capacity. The school and its grounds occupy 31 acres.

The dedication ceremony was attended by 1500 people. Exhibits from the U. S. Naval Air Station at Grosse Ile, Mich., were included in the school's open house and USS *Amherst* (PCER 853) and USCGC *Tupelo* (WAGL 303) were open to public inspection on Lake Erie in honor of the occasion.

A highlight of the formal dedication was the unveiling of a bronze bust of Admiral King by his son, CDR Ernest J. King, Jr., USN.

HOMETOWN—CDR Ernest J. King, Jr., USN, unveils bust of his father, FADM King, CNO during WW II, in the dedication ceremony.

FltActs Transportation Pool

Phileas Fogg and friend are supposed to have junketed around the world in 80 days. Admittedly they were driving a balloon, but still and all, compared to the achievements of the Transportation Division, U. S. Fleet Activities, Yokosuka, Japan, those fictional globe-trotters were just pikers.

According to word recently received from the Far East, the more than 350 vehicles operated by that outfit collectively cover the same amount of mileage *every three days.*

That's a lot of two- and four-wheel driving (more than three million miles during fiscal 1961) by any standard. In racking it up, the division's 14 Navymen and 400-plus Japanese civilian employees work 24-hours-a-day, seven-days-a-week operations, vehicle maintenance and repair shifts.

A branch of the FLTACTS Yokosuka, Public Works Department, the transportation division is itself divided into two large branches — vehicle operations and maintenance — with each of these in turn subdivided into numerous smaller sections.

Operations occupies 16 buildings, and is responsible for maintaining and operating a central motor pool; sub-pools for Fleet and station use; bus service, including school buses, and wrecker and trouble call truck service on a 24-hour-a-day basis.

Off-station buses provide continuous service to NAS Atsugi, the Nagai Housing Area, Tachikawa AFB and the Yokohama Naval Housing Activity. Two of the Tachikawa-run buses have been converted and equipped with aircraft reclining seats to provide more comfortable rides over the long, rough roads.

Still another operations branch responsibility is the FltActs Driving Range — a busy, busy place. During September 1961, for example, five OpDiv personnel processed more than 1000 applications for drivers' licenses, and inspected some 60 commercial vehicles for on-station permits.

Two hundred and fifty-three of the 400-odd Japanese employees work in the operations branch. One hundred and fifty-one of them are drivers and, amazingly, in view of the number of miles driven, 133 of them received Safe Driver Awards in fiscal 1961.

The maintenance branch, covering more than five and one-half acres and occupying 13 buildings, performs major and minor overhauls, rehabilitation, and, if needed, complete rebuilding services for FLTACTS vehicles and for those of many other commands and forces afloat stationed in the vicinity.

In addition to being the largest Navy vehicle maintenance organization in the Far East, it also contains the only shop properly equipped to repair jet aircraft fuel trucks. Because of this, it also performs maintenance jobs for many other activities, including the First Marine Air Wing at Iwakuni.

Scheduled maintenance is performed on some 1300 vehicles a year, with approximately 50 passing through the shops each day.

In spite of its huge workload, the transportation division, through consolidation with other commands and improved personnel distribution, has managed to save more than a million dollars in money and equipment since January 1960.

It has found time, too, to lend a neighborly helping hand. Personnel and equipment from the division are helping to level ground and build a short section of road nearby for use by the Japanese Maritime Self-Defense Force.

— Cecil G. Smith, JO3, USN.

Out of the Scrap Pile

With twenty dollars worth of scrap material and 20 hours of volunteer overtime work, the men of the ground support equipment branch at the Navy's Miramar Air Station, San Diego, have put together a device they call the Universal GSE (Ground Support Equipment) Servicing Ramp.

Because modern ground support equipment is built so close to the ground, the maintenance men were having trouble wiggling under it to work on it. Jacks and blocks proved to be both hazardous and time-consuming.

The new ramp enables the maintenance men to run a piece of ground support equipment up to a comfortable height. Furthermore, there's less danger of it falling on the man beneath it.

The Miramar crew says it is willing to furnish the specifications to anyone in the GSE maintenance business. Just write to the Aircraft Maintenance Dept., Naval Air Station, Miramar 45, Calif.

NEW SCHOOL — FADM Nimitz smiles as his portrait is unveiled.

Nimitz Dedicates School Named for Him

There was standing room only in the 709-seat auditorium as the Navy's senior officer took the lectern. His theme was education:

"The Navy has always encouraged potential recruits to stay in school as long as possible and to obtain as much formal education as possible before seeking a career in or out of military service.

"Only by being well informed in the social sciences can we Americans know the dangers facing a democracy and the ways to combat communism."

The setting was the dedication ceremony of Chester W. Nimitz Junior High School, Tulsa, Okla. The speaker was Fleet Admiral Chester W. Nimitz, USN.

Since his last full-time Navy assignment as Chief of Naval Operations (Dec '45 to Dec '47), Fleet Admiral Nimitz has been active in civil and government affairs as a leading citizen and the Navy's senior ranking officer.

He is perhaps best known for his wartime service as Commander in Chief, U. S. Pacific Fleet, to which he was appointed 10 days after the attack on Pearl Harbor. His job was to put back together what was left of the Pacific Fleet and go on to win a war. Less than four years later, he was on board USS *Missouri* (BB 63) for the signing of Japan's surrender.

The admiral will be 77 years old next month.

NEW GROUP—Fleet Admiral Nimitz swears in new men at Naval Reserve Training Center, Tulsa, while in town for school dedication.

Master Chief Enrolled in NESEP Stands First in His Class at College

In June 1946 Donald O. Burrell was a high school student and worked part time as a bell boy at a hotel in Mason City, Iowa. Today he's a Master Chief Electronics Technician and an "A" student at the University of Kansas under the Navy Enlisted Scientific Education Program. He stands first in his class after two years of study toward a degree in electrical engineering .

Chief Burrell contends that NESEP is the greatest opportunity ever offered to Navy enlisted men. And he has been around long enough to make valid comparisons.

Before he entered the Navy, Chief Burrell didn't like school—he wanted to quit. His parents suggested otherwise. "My father didn't say much," he recalled, "but he backed up mother. When he said, 'You will' I did." He graduated from the Mason City, Iowa, high school in June 1946 with just below average grades.

He joined the Navy in July 1946 to get away from school and studies. Like many others have before him, Chief Burrell learned that Navymen also found it necessary to hit the books. Somehow his attitude changed.

After recruit training he attended his first electronics school. As in high school, he ended up in about the middle of his class. At a 28-week advanced ET course, however, he was second in his class. This was the last time. At a 52-week ET course, at a four-week ET course, and at a three-week instructor's course, he was first in his class. And now he is again first in his class, after two years of study at the University of Kansas.

EARNING a college degree under NESEP, and first in his class, is Donald O. Burrell, ETCM, USN.

Advancement came fast for Burrell because of his own initiative and hard work. In less than seven years he was advanced to chief petty officer. He made E-8 in 1958 and E-9 in 1959.

Chief Burrell applied for NESEP while in the Nuclear Power Training Program at Idaho Falls, Idaho. In the same year, he also applied for a commission under the Navy's Limited Duty Officer program.

He was accepted into NESEP, but before a relief could be ordered in to replace him, he was also notified of his selection as ensign in the LDO program. He refused his LDO commission in favor of NESEP.

"It required a good deal of thought," he admitted, "but I felt the NESEP opportunities — the advantages of an education plus a commission — far outweighed the advantages of the LDO program." He entered the University of Kansas — one of his choices — in September 1959.

Chief Burrell attributes his scholastic success to his previous Navy training, which taught him to allocate his time and efforts properly. Burrell pointed out that poor study habits are the cause of most of the trouble in the first and second years of school. "You must make good use of your time to succeed," advises Burrell.

Upon graduation in 1963, Chief Burrell will attend Officer Candidate School before receiving his commission. He hopes to keep a special designator in electronics.

Chief Burrell has not, perhaps, achieved any more success than some other Navymen have before him. He is. however, an outstanding example of what hard work and devotion to duty can achieve.

—LCDR R. L. Dodd, USN

Training Korean Navy Divers

Every six months, the Seventh Fleet's USS *Conserver* (ARS 39) calls at Chinhae, Korea, where members of its crew instruct Korean sailors in the important art of salvage diving.

The ROKN divers in *Conserver's* classroom are students in a six-week course at the ROK Navy's school at Chinhae, where they learn the fundamentals and theory of deep-sea, shallow-water and Scuba diving.

While under U. S. Navy instruction, Korean divers are taught safety precautions. They are also tested for oxygen tolerance.

In *Conserver's* pressure chamber, Korean divers are taught how to exhale correctly underwater to avoid rupturing their lungs.

After the ROKN divers pass their oxygen tolerance tests, they are put through their paces at typical underwater salvage jobs in 50 feet of water — such as cutting, welding, patching and tunneling under heavy objects with high-pressure water hoses.

Conserver also conducts similar training in Formosa.

Aluminum Submarine

Will submarines of the future be made of light, shiny aluminum? They may. The Woods Hole Oceanographic Institution is planning a series of tests with the world's first aluminum sub—appropriately named *Aluminaut*—when the 50-foot craft, now under construction, is ready for sea early next year. If successful, the idea of such subs may go further.

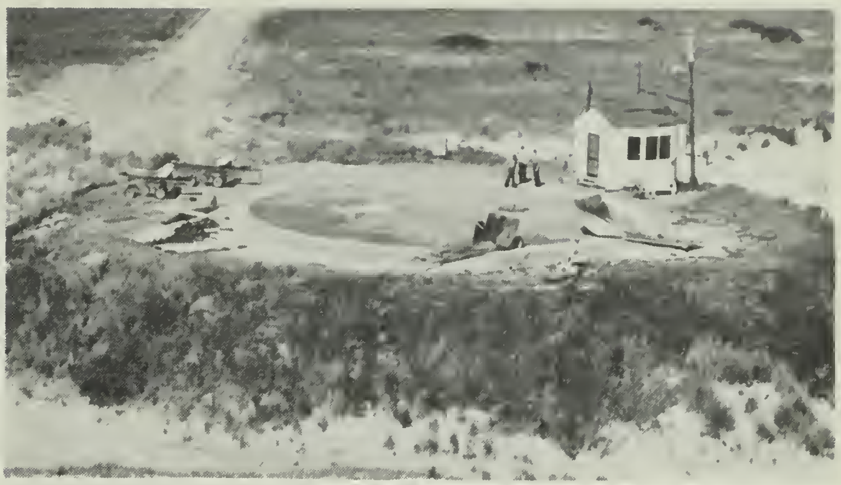
Navy interest in *Aluminaut* embraces both oceanography and sub design. When she begins to operate she will represent a major Navy contribution to the National Oceanographic Research Program, which involves several government agencies. New facts on minerals of the deep and the location of previously untapped food sources on the ocean floor may be developed.

The sub is designed to operate deeper than any manned vehicle except the bathyscaph *Trieste*, which in 1960 submerged to a record 35,800 feet in the Marianas Trench. The ship will carry three men, two of them scientists, and more than a ton-and-a-half of instruments. She should be able to submerge to 15,000 feet, but has a slow, 3.8-knot predicted maximum speed.

Aluminaut will be propelled by

two main five-horsepower units, each driving twin propellers. Some of her equipment will include underwater TV, a mechanical arm with which scientists can pluck oceanographic samples from the bottom and underwater searchlights. Four plastic viewing ports will make it easy to study features of the ocean floor too large to photograph and too small to study with echo sounders.

Enthusiastic "aluminiks" figure the sub will be able to gain access to 60 per cent of the ocean bottoms throughout the world—an area greater than all the dry land of the earth, or five times the surface of the moon. Dr. Paul Fye, Director at Woods Hole, calls it a "giant step forward in the furtherance of the science of oceanography."



RADIO-CONTROLLED drones used as aerial targets for live firing by gunnery students at Dam Neck, Va., are launched from this mound.

Big Noise at Dam Neck

The U. S. Fleet Anti-Air Warfare Training Center at Dam Neck, Virginia is now going on 21. It completed two decades of service last November.

When the center's first CO assumed command, the facility consisted of two frame buildings, both of which were still under construction. Four gunner's mates were assigned to begin training gun crews on the firing line as soon as the 20 and 40-millimeter guns were installed. The CO's wife doubled in brass as a volunteer yeoman.

The next month, the Japanese attacked Pearl Harbor and, like many other installations, the center at Dam Neck sprang suddenly to life, training more than 200,000 enlisted men and 25,000 officers during the first two years of the war on gun lines that operated from noon until midnight every day. Dam Neck is still the Navy's only live firing range for training ship's gunnery crews.

The installation survived the mass deactivations of the immediate postwar years, and was converted to a permanent activity in 1949. Five years and several million dollars later, the center had permanent buildings and facilities for radar and combat information center team training and a guided missiles school.

The future promises continued growth for the center. A Fleet programming center will be commissioned at Dam Neck in the near future.

From Warehouse to Gym

Navymen stationed in the Sasebo, Japan, area, and visiting Seventh Fleet sailors as well, now have a spacious new sports arena at their disposal.

It was converted from a no-longer-in-use general storage warehouse.

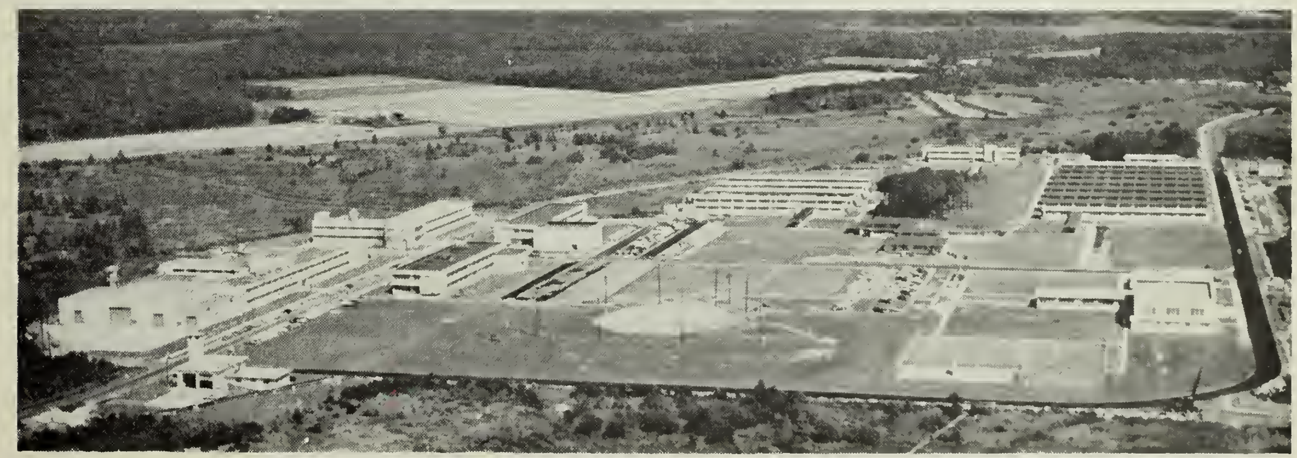
Designed to fill a long-standing need for more recreational facilities around Sasebo, the gym's 28,000-square-foot area makes it the largest military gymnasium on Kyushu Island.

With its 11 separate compartments and courts it can handle two basketball games at once, while simultaneously providing space and facilities for handball, volleyball and badminton, plus several exercise rooms.

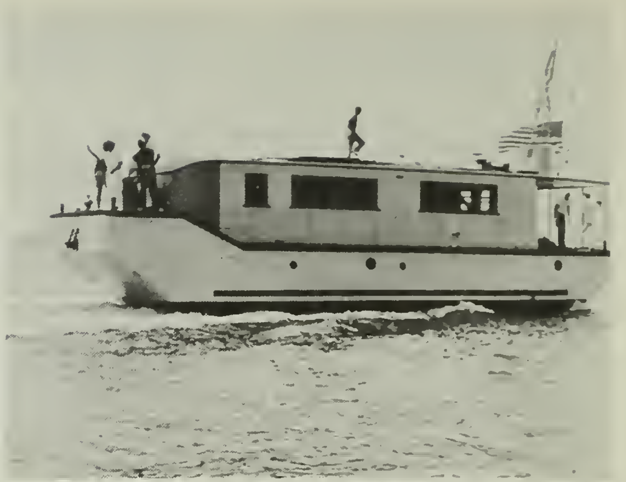
The bleachers have a seating capacity of more than 700. Two large locker rooms can accommodate almost 100 persons at a time.

There is also a separate area marked off for the broad jumps, high jumps and other minimum requirements set forth in the Navy's new physical fitness program.

The new gym is named for Captain William R. (Ike) Wilson, USN, Commander Fleet Activities, Sasebo, who was the prime mover behind a drive to convert the warehouse into a Fleet gymnasium.



AERIAL VIEW shows general layout of the U. S. Fleet Anti-Air Warfare Training Center at Dam Neck, Va.



IN DINING room of their houseboat *Peregrine* are CDR and Mrs. Sidney E. Taylor. Rt: *Peregrine* is launched.

Navyman's Houseboat

Got a high rent problem? If you have, you might be interested in the solution of one Canal Zone-based Navy commander.

CDR Sidney E. Taylor, USN, who candidly admits that "the last thing I ever tried to build was a picnic table, and that has always wobbled," realized a quarter-of-a-century dream recently with the launching of his 35-ton houseboat *Peregrine.*

A large crowd of well-wishers, including RADM R. S. Craighill, USN, Commandant of the 15th Naval District, stood by at the Fort Amador, C. Z., building site as Mrs. Taylor, a hard-working collaborator on the actual construction of the boat, splattered the traditional bottle of champagne on *Peregrine's* hull and sent her sliding down the ways.

The commander and Mrs. Taylor, a Civil Service carpenter, fellow officers, other "experts" from among the local boating fraternity and occasional casual laborers have worked on *Peregrine* since November 1957. Some 20,000 board feet of lumber and approximately $18,000 have gone into the craft, which CDR Taylor, 15ND Planning Officer, and his wife call "a labor of love."

Upwards of 25 years ago, CDR and Mrs. Taylor were a pair of young Californians active in yachting off the Pacific Coast, and intensely interested in some day building, and owning, a yacht of their own.

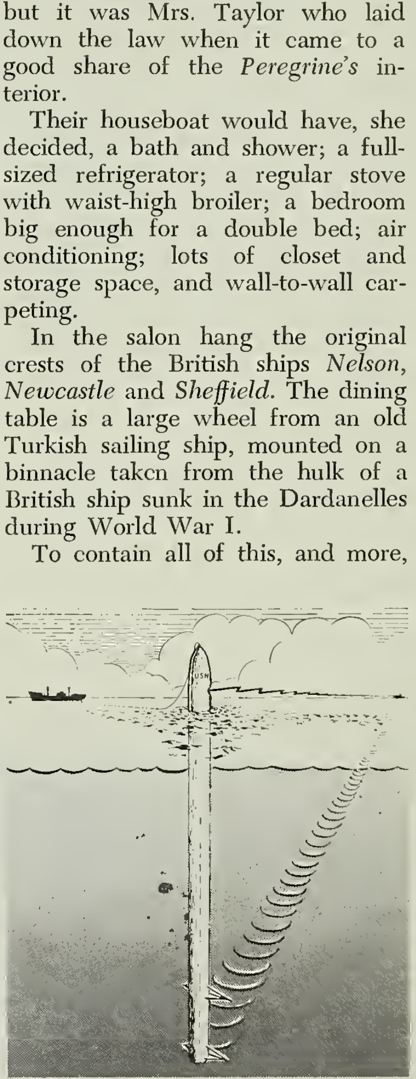
Those plans kept getting pushed aside, however, first by World War II, and then by the commander's decision to make the Navy his career. Four years ago, they finally decided a houseboat was the answer.

It's no ordinary houseboat, either. CDR Taylor may have been designer and O-in-C of construction—but it was Mrs. Taylor who laid down the law when it came to a good share of the *Peregrine's* interior.

Their houseboat would have, she decided, a bath and shower; a full-sized refrigerator; a regular stove with waist-high broiler; a bedroom big enough for a double bed; air conditioning; lots of closet and storage space, and wall-to-wall carpeting.

In the salon hang the original crests of the British ships *Nelson, Newcastle* and *Sheffield.* The dining table is a large wheel from an old Turkish sailing ship, mounted on a binnacle taken from the hulk of a British ship sunk in the Dardanelles during World War I.

To contain all of this, and more, *Peregrine* has been built 48 feet long, 16 feet wide, and is powered by two 225-horsepower diesel engines. She will make about eight knots.



RECEIVER — Artist's conception shows Navy's seagoing platform for acoustics research in action.

Peregrine is designed for offshore waters, and would be out of its element in the open sea. Upon his retirement, however, CDR Taylor plans to ship his houseboat across the Atlantic on a freighter, and spend several years "just cruising" in the Mediterranean.

Seagoing Platform

The Navy will soon be using a new technique to plumb the depths of the Atlantic Ocean for its acoustical secrets. The technique is based on an unmanned research vessel called SPAR (Seagoing Platform for Acoustics Research.)

SPAR is essentially a 350-foot long compartmented steel tube only 16 foot in diameter, and with a displacement roughly comparable to that of a World War II U. S. submarine. Ballast and free-flood tanks make up the interior of its lower 300-foot section, while the upper buoyancy section houses operating machinery, a gyroscopic compass and a radio direction finder.

Attached along the lower 200 feet of SPAR's rigid exterior structure, and on protruding outriggers as well, are sensitive underwater listening devices called hydrophones, all accurately aligned with the radio direction finder. Still other instruments attached in the same general area measure water temperature and pressure, and the amount of salt in the surrounding sea.

Here's how it will work.

SPAR, leashed to a tending ship

by a half-mile of power supply and tow cables attached to the top of the buoyancy section, will be towed horizontally to a selected location in the Atlantic. There, its aft end will be flooded until the vessel swings down on its end, and settles into the water. In this state, SPAR will somewhat resemble an iceberg, in that there will be much more to it than meets the eye. Carrying its hydrophones and other instruments, 300 feet of it will be floating vertically beneath the water, while only the 50-foot buoyancy section will be visible above the surface.

In this position, SPAR will be so stable in the water that its vertical motion will be less than one foot per second. This stability, which will reduce acoustical background interference from water noise to a minimum, will enable the Navy to study sound transmission over a range of depths. These will include not only the surface layer, in which temperatures are quite variable, but also the region of comparatively stable temperature below the upper layer.

SPAR has been designed to operate unmanned for months at a stretch in the frequently rough seas of the Atlantic. For this reason, all of its operating instruments and equipment are either remotely controlled or fully automatic. Even its running lights will automatically switch on at dusk.

It differs radically in this respect from its still-under-development Pacific Ocean counterpart known as FLIP (Floating Instrument Platform).

FLIP will be manned, and allowed to drift with the winds and currents of the relatively calm Pacific.

SPAR was developed by the U. S. Naval Ordnance Laboratory, Silver Spring, Md. Contracts for its construction will be administered by BuShips.

TEACHING lab diagnosis of cholera to a Philippine doctor is CAPT Robert Phillips, MC, USN, of Navy's cholera research team in Manila.

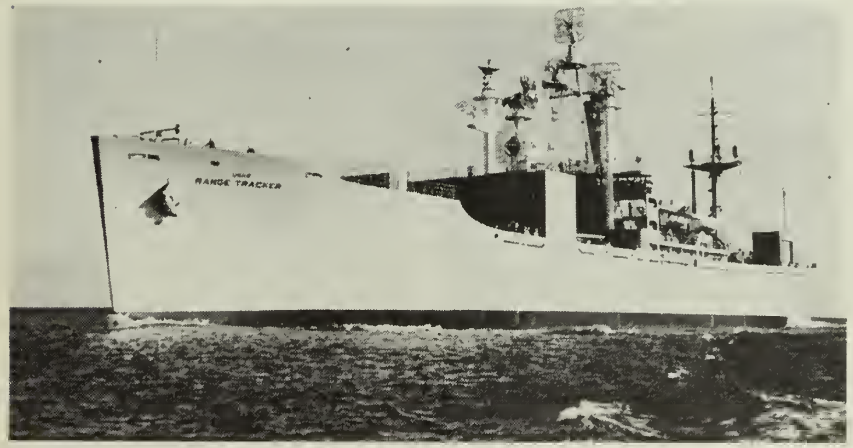
A New Guided Missile Frigate

The commissioning pennant has been run up over USS *MacDonough* (DLG 8) in the Boston Naval Shipyard. During the commissioning ceremony, the Navy's newest guided missile frigate lay beside one of the Navy's oldest frigates, USS *Constitution*, in which *MacDonough's* namesake once served.

MacDonough is 512 feet long and displaces 5,000 tons. She is the fourth U. S. Navy ship to bear the name and the ninth of the nation's guided missile frigates.

The new frigate is equipped with the advanced *Terrier* missile and also carries *Asroc* armament, torpedoes and conventional destroyer-type guns.

MacDonough's home port is Charleston, S. C.


MISSILE TRACKING ship, *USNS Range Tracker*, becomes seventh mobile down-range tracking station to join Pacific Missile Range fleet.

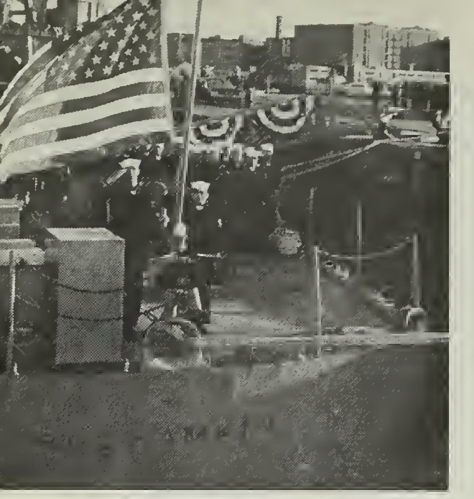
Missile Tracking Ship

A new eye has been added to the Navy's fleet of Pacific Missile Range ships in the form of USNS *Range Tracker* (T-AGM 1). The acquisition of *Range Tracker* expanded the fleet to seven ships which serve as mobile tracking platforms for recording data on missiles and satellites that are out of range of established land stations.

Range Tracker was converted from the 455-foot, World War II ship, SS *Skidmore Victory*, which was taken out of the Maritime Reserve Fleet.

The ship was converted, at a cost of more than two million dollars, into a complex electronic center which includes equipment for telemetry, tracking data handling, navigation, timing, aerology, communications, radio command and surveillance.

Range Tracker carries a crew of 17 officers, 42 crew members and 30 civilian electronics specialists. Her home port is Port Hueneme.



REACTIVATED USS *Ruchamkin* (APD 89) joins active Fleet during ceremonies at Boston, Mass.

Part-time Hurricane Hunter

USS *Firedrake* (AE 14) should be made an honorary member of the Navy's Hurricane Hunters. While en route to join the Seventh Fleet recently, this ammunition ship discovered a typhoon forming in the Pacific.

Firedrake was some 1,000 miles east northeast of Guam when she encountered progressively heavier weather which had not been reported by Fleet Weather Service.

At first the storm appeared to be a series of line squalls. As *Firedrake* continued on her course, however, the skies darkened, the seas grew and heavy rain and drizzle reduced visibility. The wind grew steadily stronger – 20, 30, 40, then 50 knots, gusting to 65 – and the barometer began to fall rapidly. *Firedrake* had no aerologist aboard, and her weather equipment consisted of a barometer, thermometer and relative wind indicator.

It became apparent, instruments or not, that more than a front or line squall had been encountered. But where was the eye of the storm, and in what direction would it move? Using all information available, the storm was judged to be perhaps 75 to 150 miles south and slightly west of *Firedrake*.

Additional weather information was requested from the Fleet Weather Service, but none was available since the storm was too young and was not on the weather map. *Firedrake* sent an urgent report on weather conditions and headed out of the storm area in nearly mountainous seas. Despite the heavy winds, she slowly worked her way northeast and gradually increased speed. With the dawn came clear weather.

Fleet Weather Central, Guam, named the storm Clara.

This was not a new experience for Captain John E. Parks, USN, commanding officer of *Firedrake*. He has seen many Pacific typhoons during his Navy career. Perhaps the most memorable occurred in 1945 off Okinawa, when he rode through the eye of the typhoon on board the escort carrier USS *Salamaua*.

Life at Holy Loch

For the past several months USS *Proteus* (AS 19) has been anchored in the Holy Loch, Scotland, to service and maintain units of the *Polaris* fleet. During that time she and the Scots have established a warm friendship.

Her crew of almost 1000, plus crews from stopover submarines and supply ships and many *Proteus* crew members' families have accounted for a sudden surge in the year-round population of this summer resort area.

Hundreds of letters of welcome, sent to the ship by local residents, give an indication of the reception they have enjoyed. A town dance, with full civic honors was given for the sailors on their second day there.

MEN of USS *Los Angeles* (CA 135) pose in front of a totem pole presented to Kobe, Japan, by their home town, Seattle, Wash.

According to CAPT Richard E. Laning, USN, commanding officer of *Proteus*, many men on liberty are taken into neighborhood homes for dinner. Lasting friendships have been established.

"It has been a very warm reception," he said. "The Scots are wonderful and friendly."

Soon after the *Proteus* operations began in March last year, families started arriving in the area. It was to be a different type of living from the life they were used to back in the States.

Homes are quaint. Central heating is practically unknown – and unwanted. Refrigerators are small. Some would fit inside an American model. Streets are empty before 11 p.m. Shops hang meat in the open, close for the noon period, and stock for traditional Scottish tastes.

And most of all, the Scottish heritage, dialect and wit combine to form an amiable and friendly society quick to welcome the U.S. sailors and families.

Scots have opened their homes to the Navy families by taking in boarders where limited accommodations have presented a housing problem. Newspapers have repeated messages of welcome, and run many picture stories of the Americans being oriented into Scottish life. Local medical officials have cooperated in arranging temporary medical care for dependents at a minimum cost until a Navy out-patient clinic becomes available.

If it weren't for this genuine friendliness, life could be difficult and perhaps discouraging for the newcomers.

Before the temporary limitations on travel of service families to Western Europe, several hundred dependents had arrived. Dependent facilities – U.S. style – are non-existent. (The nearest commissary is at an Air Force installation 50 miles away, a trip involving a five-dollar ferry crossing for cars from Dunoon.) In contrast to many overseas locations, there is no PX in Holy Loch, no American school and no American community as such, and the Americans like it! Holy Loch is not even a base – it is an anchorage – and the husbands go to and fro in small boats.

The Americans have responded to

this welcome by joining in Scottish activities. The *Proteus* dance band has played a number of engagements, including an appearance at a school for convalescent children. An Easter egg hunt, with new shoes and sweaters for prizes, was organized for local children. Sailors and their wives have taken interest in the local Boy Scouts, Girl Guides, charity bazaars for the benefit of the aged, a local toastmasters' organization, a choral singing group and a dramatic arts group located in the area.

Sailors are packing off to rewarding fishing trips with their new friends who have known the Clyde waters all their lives. American children are joining Scottish youngsters in the native country dancing lessons, and joined them in schools last fall.

Proteus' skipper has a keen eye for recreation programs and community relations. He has encouraged Navy interest in the local Highland Games. These miniature Olympics are now as exciting to *Proteus* sports enthusiasts — spectators and participants — as they have always been to Scots.

Though life is different, the Navymen and their families are thoroughly enjoying it. They and their Scot hosts have already conquered the biggest problem of settling in a new area — getting to know one another.

— **Wm. L. Howard, JO2, USN**

ENTERING PORT at Tagbilaran, Philippine Islands, *USS Enhance* (MSO 437) is the first United States warship to visit there in 14 years.

He Drew a Blank

So you think peacetime duty isn't tough?

Consider, then, the pandemonium which erupted when a series of sharp reports, sounding for all the world like a sustained burst of small arms fire, shattered the mid-forenoon calm at Mobile Construction Battalion Seven's base camp one drowsy day awhile back.

The effect was instant — and electric. All over the immediate vicinity chair legs hit the deck, doors flew open, windows slammed up. Then cautious pairs of eyes began poking around door jambs and over window ledges, all asking the same mute question — "wha hoppen?"

Outside, a small tableau presented itself — but it furnished scant enlightenment to the astonished onlookers.

There, legs spread and hands on hips, stood "Tiny," a large Battalion Ship's Serviceman largely outraged, hurling imprecations through the open Battalion Laundry door.

Understanding, however, arrived with the next morning's Plan of the Day.

One item, prominently underlined, read:

"Please remove all blank cartridges from clothing before sending it to the Battalion Laundry. The heat of the driers causes them to explode. Laundry personnel are not drawing hazardous duty pay." —

— **R. L. McMeekin, YNCA, USN**

Bean Soup *a la McGinty*

Navy Day, last October 27, was "B-day" too for Commissaryman Second Class Joseph Ventura, USN, ship's cook of the Pearl Harbor-based escort vessel USS *McGinty* (DE 365.)

That was the day a six-man panel of judges gave a final lick to their chops, a final pat to their mid-sections, and selected Ventura's entry for the grand prize in the NAS Memphis Fifth Annual Navy Bean Soup Contest. Ventura, a Bristol, R. I., native who is a 15-year Navyman and father of four, was awarded a $100 check for his efforts as this year's best bean soup cook.

His winning recipe, an exotic combination of beans, sausage, tomato juice, bouillon cubes, onions, etc., topped upwards of 500 other contestants who submitted concoctions from the far corners of the world.

Co-runners-up were an NAS Alameda tandem, CSC William C. Shirley and CS3 Roy E. Freiberg, while third place honors went to Irene L. Malloy, a Navy Department Civil Service employee in the office of the Inspector of Naval Material, Atlanta, Ga.

The NAS Memphis annual salute to the bean opened officially last August, with entries confined to military personnel, their dependents, and civilian employees of the military services. Each was required to submit a recipe which would serve six persons.

Entries flowed in from ships and stations all over the Navy. They came from new atomic-powered ships, and from the old Navy as well —from a woman, for example, who cited her recipe as "the same as that used for the bean soup served my husband when he first enlisted in the Navy almost 30 years ago."

The field was eventually narrowed to six finalists in early October. Then, on Navy Day morning, the NAS Memphis galley's culinary experts prepared these six recipes with tender loving care.

Ventura's entry, as already noted, bowled over all opposition, winning unanimous approval of the judges. And, in addition to the check, his ship will receive an engraved trophy commemorating his achievement.

THE WORD

Frank, Authentic Information On Policy — Straight From Headquarters

• **FEBRUARY EXAM** — If you expect to be advanced in rating as a result of the Navy-wide examinations being held next month, you'd better be hitting the books right now.

The test for chief petty officer (E-7) will be held on Tuesday, 6 February; for E-6 (PO1) on Thursday, 8 February; for E-5 (PO2) on Tuesday, 13 February; and E-4 (PO3), on Thursday, 15 February.

If you fail your examination this year, or if you pass but are not rated, you will be told by the Naval Examining Center in what areas you were weak, and also in what areas you were strong.

The information will be returned to you on an individual examination profile card, which will be sent to your command, and then given to you after the results of the examination have been published.

Recently, nuclear submarine allowances have been changed to include the machinist's mate rating. Enginemen trained in nuclear propulsion are also filling some machinist's mate billets in the surface nuclear propulsion program. To place these men in their proper billets, authority has been granted for enginemen or EN strikers in pay grades E-3 through E-6, who hold a BuPers-assigned NEC of nuclear power-plant operator, to compete for advancement in either EN or MM in the next higher pay grade.

Involuntarily recalled Naval Reservists will be administered the same examinations as active-duty personnel. They will, however, be processed separately, thus competing among themselves. Separate, proportionate quotas will be computed for men in this category so that they will not compete for Navy-wide quotas.

Those Reservists who pass the examination, but are not advanced because of quota limitations, may be advanced after release to inactive duty and return to a Naval Reserve unit, in accordance with BuPers Inst. 1430.1D and P1430.7D.

Information concerning the February examination was listed earlier in BuPers Notice 1418 of 20 Nov 1961.

• **ALIENS MUST REPORT ADDRESS** — If you or your family are aliens, and are living within the United States or one of its possessions, you must report your address to the U.S. Attorney General during the month of January.

During January, all post offices have cards on which to file this report, or they may be obtained from the Immigration and Naturalization Service of the Justice Department at any time during the year.

If you willfully fail to submit this report, you are subject to fines, imprisonment or deportation.

Aliens who are temporarily outside the United States during January must report their address within 10 days after they return to the U.S.

• **IS YOUR FITNESS REPORT IN?** — If you are an officer of the Regular Navy serving on active duty under a permanent appointment in the grade of ensign, you are eligible for *permanent* promotion to the grade of Lieutenant (junior grade) on the third anniversary of your date of rank as ensign.

Mental, moral, and professional qualifications for such promotion will be determined solely on your record by the Naval Examining Board. If you are eligible you should insure that your last regular fitness report has been forwarded to the Chief of Naval Personnel. Your physical qualifications will be determined from your most recently reported physical examination in conjunction with your records and present duty status, thus eliminating the special physical previously required.

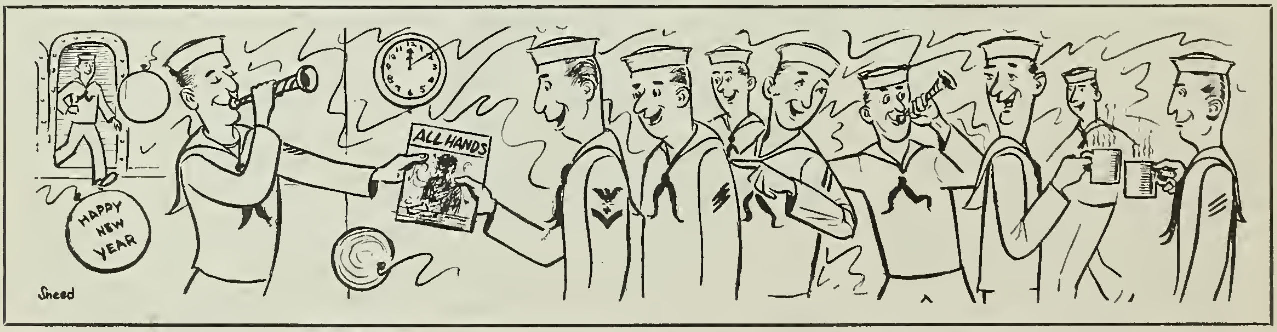
This change, described in detail in BuPers Inst. 1426.1B, applies only to those officers serving on active duty who hold permanent appointments as ensigns, and does not apply to Regular Navy officers serving solely under temporary appointments nor to Reserve officers.

• **NEEDED: SUBMARINE VOLUNTEERS** — Because of the accelerated shipbuilding program for Fleet Ballistic Missile Submarines (SSBNs), there is a growing need in submarines for top-notch petty officers. There are 110 men in each of the two crews for a *Lafayette* class sub, and every man of each crew must be qualified in submarines. These men can be divided into three groups:

Group I (35 men per submarine crew) ET, EM, IC, EN and MM ratings are qualified nuclear power plant operators, graduates of the one-year nuclear power training course.

Group II (31 men per crew) — ET, FT, GS and TM ratings are graduates of various advanced courses in the *Polaris* weapon system.

Group III (44 men per crew) — QM, SO, RM, YN, SK, CS, EN, HM and SD ratings are not required to have advanced technical training in either nuclear power or the *Polaris* weapon system. QMs, SOs,



START THE NEW YEAR off right—Pass ALL HANDS Magazine on to the nine other Navymen waiting for it.

RMs and HMs do, however, receive special training in connection with the duties of their ratings.

At present, requests for submarine duty are urgently needed from men in these ratings and pay grades:

MM1, 2, 3	**See Note 1, 3**
ETC, 1, 2	**Note 2, 3**
GSC, 1, 2, 3, Striker	**Note 2, 3**
TMC, 1, 2, 3, Striker	**Note 2, 3**
QM1, 2, 3, Striker	**Note 3**
YN1, 2, 3	**Note 3**
SK1, 2	**Note 3**
CS1, 2, 3	**Note 3**
SD1, 2, 3, TN, TA	**Note 3**

Note 1: Must be eligible for nuclear power training in accordance with Chapter 11, *Enlisted Transfer Manual* (NavPers 15909A).

Note 2: Must meet current eligibility requirements for Class A Schools in order to be eligible for *Polaris* training (See NavPers 91769E, *Catalog of U. S. Naval Training Activities and Courses*).

Note 3: All applicants for submarine training must be eligible in accordance with Chapter 10, *Enlisted Transfer Manual.*

Men in other ratings, eligible for submarine training in accordance with Chapter 10, *Enlisted Transfer Manual,* are also encouraged to apply. Currently, however, there is a waiting list of SOs and RMs.

Requests for sub training should be submitted on the Enlisted Evaluation Report (NavPers 1339) via your commanding officer direct to the Chief of Naval Personnel (Attn: Pers-B2131).

- **SO(A) AND AT(S) GET AX** — The rating of Aviation Antisubmarine Warfare Technician (AX) has been established to replace the ratings of Sonarman (Airborne), SO(A), and Aviation Electronics Technician (Antisubmarine Warfare Equipment), AT(S).

The duties of men in the new AX rating will encompass all the operating and maintenance functions of airborne sonar and ASW detection equipment now carried in fixed-wing aircraft and helicopters. (It is anticipated that greater quantities and varieties of ASW detection equipment will be installed in helicopters in the future.)

Men who are now SO(A)s or AT(S)s will be given the opportunity to qualify for the new AX general rating.

Instructions to implement this rating structure change should be issued in about August 1962 and the first Navy-wide examination for AX is scheduled for February 1963.

- **CHANGEOVER TO BOILERMAKER** — If you're a boilerman (BT2, BT1 or BTC) and could use an extra $30 a month (with a chance for $60), you should change your rate to Boilermaker (BR). The Navy needs boilermakers, and the Chief of Naval Personnel has indicated there is a good probability the BR rating will be added to the list of 14 ratings currently eligible for automatic proficiency pay.

At the end of fiscal year 1961 the on-board strength of the BR rating was about 30 per cent of requirements even though BTs are given an option, when they make second class, either to continue in the BT rating or change to the BR rating. Most remain in the BT rating.

Aging ships and heavy operating schedules have placed increased emphasis on the skills of men in the BR rating. Because of the shortage of BRs, there are excellent advancement opportunities in that rating, plus the possibility of automatic proficiency pay (P-1) and the chance to compete for P-2.

To help men in the BT rating meet the requirements for BR, a mandatory quota of eight BTs per class has been established for the intermediate welding course of the Class C-1 welding school in San Diego. All BTs in pay grades E-5 through E-7 are eligible, provided they complete a signed statement of intent to change rating to BR. Special training to supplement your experience in boilermaking will be provided at the Class C-1 welding school.

Naval shipyards can also furnish supplemental welding training for enlisted personnel. This training is outlined in BuShips Notice 1541 of 31 Jul 1961.

If you are a BT, and wish to change your rating to BR, you should submit your request to the Chief of Naval Personnel, via your commanding officer. Your CO will screen your application, and decide whether or not you need to attend welding school.

BT2s who have completed the Class C school or similar training, as explained in BuPers Notice 1440 of 3 Nov 1961, may be recommended for participation in the regular Navy-wide examination for Boilermaker first class.

QUIZ AWEIGH

The Navy is a military organization. Perhaps we don't normally march and fight in the same manner as men in our land-going sister services, but we are expected to know, and be able to execute, certain fundamental military drills. If you are non-rated you should know them so you can follow instructions. If you are a petty officer, you must know them to command a group of men. See if you know these basic commands.

1. While AT EASE, you: (a) Keep your right foot in place and remain silent, but are allowed to shift your weight and move your left foot; (b) Remain in general formation, can move either or both feet, but must remain silent; (c) Keep your left foot in place, but you are allowed to talk in low tones.

2. When given the command REST, you: (a) Remain in the general area, but need not keep either foot in place or remain standing; (b) Keep your right foot in place, but you may talk; (c) Keep one foot in place, and remain silent.

3. When given the command FALL IN, you are required to: (a) Form ranks and stand at attention; (b) Form ranks and stand at ease; (c) Form ranks and stand at Parade Rest.

4. When the command FORWARD MARCH is given, you should step out first with: (a) The left foot; (b) The right foot; (c) Either foot.

5. The command HALT from forward march (quick time) should be given: (a) As the left foot strikes the ground; (b) As the right foot strikes the ground; (c) As either foot strikes the ground.

6. If you are required to stand at attention for a long period, you should: (a) Shift weight and relax even if it makes you sway; (b) Lock knees and remain rigid; (c) Flex and unflex muscles, shift weight, but do so in a way that onlookers can't detect.

Quiz answers may be found on page 54.

Reemployment Rights Protected During Partial Mobilization

REEMPLOYMENT RIGHTS for personnel enlisting in the Navy – or called to active duty – during the current period of partial mobilization have been provided by additional amendments to the Universal Military Training and Service Act.

The changes are contained in Public Law 87-391. Following is a summary of the provisions of the new law:

- Any person who, after entering the employment to which he claims restoration, enlisted in the armed forces (other than a Reserve component) shall be entitled, upon release from service under honorable conditions to all reemployment rights and benefits provided persons inducted under this law, if the total of his service performed between 24 Jun 1948 and 1 Aug 1961 did not exceed four years, and the total of any service, additional or otherwise, performed by him after 1 Aug 1961 does not exceed four years (plus, in each case, any period of additional service imposed by law).
- Any Reservist who, after entering the employment to which he claims restoration, enters upon active duty (other than for the purpose of determining his physical fitness and other than for training) – whether or not voluntarily – in response to an order or call to active duty shall, upon his relief from active duty under honorable conditions, be entitled to all of the reemployment rights and benefits provided persons inducted under this law, provided the total of active duty performed between 24 Jun 1948 and 1 Aug 1961 did not exceed four years, and the total of active duty, additional or otherwise, performed after 1 Aug 1961 does not exceed four years (plus, in each case, any additional period in which he was unable to obtain orders relieving him from active duty).
- Reservists shall, upon request, be granted a leave of absence by their employers for the period required to perform active duty for training (ACDUTRA) or inactive duty training. Upon release from a period of ACDUTRA or inactive duty training – or upon discharge from hospitalization resulting from that training – the Reservist will be permitted to return to his position with the seniority, status, pay, and vacation he would have had if he had not been absent. To qualify for this benefit the Reservist shall report for work at the beginning of his next regularly scheduled working period after expiration of the last calendar day necessary to travel from the place of training to the place of employment following his release – or within a reasonable time thereafter if delayed return is caused by factors beyond his control. Failure to report for work at the next regularly scheduled working period shall make the employee subject to the conduct rules of his employer pertaining to explanations and discipline with respect to absence from scheduled work.

(A previous amendment to the law provides reemployment rights for all Reservists who are ordered to an *initial* period of ACDUTRA of not less than three consecutive months, provided they apply for reemployment within 31 days after release from ACDUTRA. This provision applies to all Reservists entering on an *initial* period of ACDUTRA on or after 10 Sep 1960.)

All-Navy Cartoon Contest
A. J. Spencer, IC3, USN

"This is your operator; your time is up; please deposit . . ."

Reservists must request leave of absence from their employer for any kind of Reserve training—other than their initial ACDUTRA period of not less than three consecutive months – which will require absence from their work. This would include weekly or weekend drills, annual tours of training duty, special courses of instruction and other types of Reserve training. In the case of drill attendance, a single request citing the date and time of the regular drill periods will be satisfactory; however, whenever the date and time of the regular drill periods are changed, a new request will be necessary.

If the employee is hospitalized as a result of ACDUTRA or inactive duty training, he shall be required to report for work at the beginning of his next regularly scheduled work period after expiration of the time necessary to travel from the place of discharge from hospitalization to the place of employment, or within a reasonable time thereafter if delayed return is caused by factors beyond his control, or within one year after his release from ACDUTRA or inactive duty training, whichever is earlier. If an employee covered by this provision of law is not qualified to perform the duties of his position because of disability sustained during ACDUTRA or inactive duty training, but is qualified to perform the duties of any other position in the employ of the employer or the employer's successor, he shall be restored to the position which he is qualified to fill so that he will have like seniority, status, pay, or the nearest approximation consistent with the circumstances in his case.

The new law also provides that an employee shall be considered as having been on leave of absence during the period required to report for the purpose of being inducted into, entering, or determining by a pre-induction or other examination his physical fitness to enter the armed forces. Upon his rejection, following completion of his pre-induction or other examination, or upon his discharge from hospitalization incident to that rejection or examination, the employee shall be permitted to return to his position.

Further details on reemployment rights will be contained in a forthcoming revision of BuPers Inst. 1571.16A.

PO Military Academy At NAS Whiting Field Rates High in Leadership

Effective naval leadership, as defined by General Order 21, is the art of accomplishing the Navy's mission through people. And people, in the Navy's case, are the officers and petty officers who furnish the Navy its leadership.

Unfortunately, while there have been, and are, born leaders, there are all too few of them. Most Navymen, however, can be taught to be better and more effective leaders. At Whiting Field, Fla., POs serving with the Naval Air Basic Training Command are reaping the benefits of such instruction at a very fine leadership school—the Whiting Field Petty Officer Military Academy.

Several items help make the Whiting Field POMA outstanding in its field. A main reason, of course, is the solid command interest and backing the school receives. Another is POMA's staff of instructors — all veteran CPOs who are themselves graduates of both the Military Management Academy at NAAS Saufley Field and the NATC CPO Leadership School at Pensacola.

Still another is the fact that POMA functions under the control of the Training Department, enabling the school's instructors to make full use of that establishment's extensive facilities.

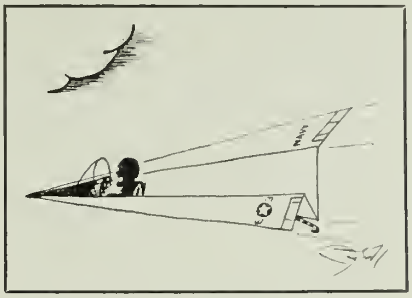
Whiting Field POMA students get a concentrated three-week course offering a total of 98 hours of instruction in six separate and distinct phases.

They are:

Phase I — Drill and Command
Phase II — Teaching Principles
Phase III — Military Justice
Phase IV — World Situation
Phase V — Human Behavior and Leadership Techniques
Phase VI — Final Presentation

- *Phase I* (Drill and Command) consists of 17 hours on the drill field and five hours of classroom instruction. Students receive two daily inspections for practice and instructional purposes during this phase.

Sandpoint Skylines
NAS Seattle, Washington



"Brand new aircraft design or not, I still have a funny feeling that I've seen it before."

- *Phase II* (Teaching Principles) devotes 17 hours to the various techniques of preparing and presenting a lesson, or conducting discussion groups. Students must give at least two 10-minute presentations during this phase as an aid in developing skill in self-expression.
- *Phase III* (Military Justice) entails 17 hours of study and review of the UCMJ, with emphasis on the fact that the UCMJ is for the protection of all military personnel, and not just an instrument of punishment.
- *Phase IV* (World Situation) covers the field of geopolitics, and gives the student an up-to-date outlook on current world problems. This in turn provides him with a better understanding of newscasts, newspaper articles and interpretation of current events. The most popular and thought-provoking phase of the entire course, it covers a total of 17 hours.
- *Phase V* (Human Behavior and Leadership Techniques) deals with the reactions of a Navyman as a human being, involves the study of basic psychology, and points up the need to consider each man as an individual, with individual needs and motivations.

In addition to the regular lectures in this 17-hour phase, guest speakers are invited to present talks relating to leadership.

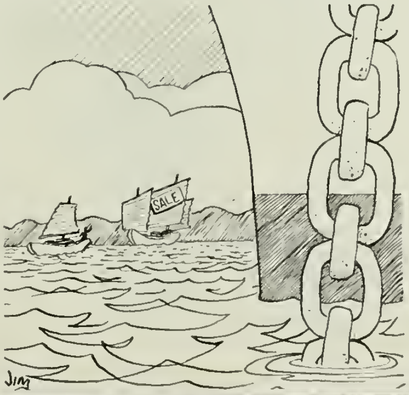
To conclude the course, the final presentation consists of an address by the CO or a guest speaker.

HOW DID IT START

Bumboat

A bumboat is any small boat which carries items for sale to men on board ships in port or offshore. It is not necessarily the hobo's answer to a yacht, as the name implies.

The word bumboat is thought to be a corruption of the Dutch "boom boat", a small craft permitted to lie at the boom of a ship and remove refuse. The word first appeared in English in 1685, when bylaws were established to regulate the scavenger boats which serviced ships in the Thames, the chief river in England.



During the 19th century bumboat salesmen in foreign ports supplied many U. S. Navymen with such items as pastry, milk, fruit, tobacco, stationery, sewing materials, towels and soap. Only bumboaters of high repute were permitted to peddle their wares to Navymen, and then only after obtaining the consent of the ship's executive officer. Even then the bumboats were inspected by the ship's master-at-arms. He saw that no unauthorized articles were carried aboard. The ship's surgeon also checked bumboat goods to make sure the men didn't purchase items of food that would make them sick.

Now that most ships have their own stores, in which any necessary supplies are available at reasonable prices, bumboat peddlers pretty well limit their selection of products to native clothing, trinkets, baskets, mats and other souvenir-type items.

These days, bumboats are perhaps most plentiful around the small islands of the Pacific and the Asiatic coast. Samoa and Hong Kong, to mention a couple, are well known among Navymen as ports in which you need simply lean over the side of your ship to haggle for trinkets with enterprising native hucksters in bumboats.

Here's a Chance for Navy Juniors to Receive Scholarship Aid

YOUR SON OR DAUGHTER may receive that college education after all. A number of organizations and schools have set up scholarship assistance programs, for which your son or daughter may be eligible. The Chief of Naval Personnel has been asked to help award these scholarships.

To be eligible, your youngster must be a graduate of an accredited high school or its equivalent, or be expected to graduate from such a school before the start of the next college year. Applicants who are already working at the college level are also eligible.

Your son or daughter should normally be approved for admission to the college of his or her choice, or at least be reasonably sure of admission to that school, before requesting consideration for one of the available scholarships. These funds are paid directly to the school.

The following scholarships are available to sons and daughters of naval personnel, and are supervised by the Chief of Naval Personnel:

- *The Clausey Medal of Honor Scholarship Foundation* – This foundation provides a scholarship award, for study at or beyond the college level, to a child of an officer or enlisted man of the Navy or Marnie Corps who died in service or of a disability incurred or aggravated during World War I, World War II or the Korean conflict. The award is an outright grant of not more than $500. It is given annually to an individual, or may be divided between two or more applicants.
- *Navy Wives Clubs of America Scholarship Foundation* – This organization makes one or more annual scholarship awards to sons and daughters of enlisted Navymen. The grant may be used for a college education or vocational, business or similar training. The applicant for this award must be the child, legally adopted child, or stepchild of an enlisted member of the Navy, Marine Corps or Coast Guard on active duty, retired with pay or deceased. This is an outright grant of at least $350 per academic year. The number and value of the awards offered each year by the foundation depend on available funds.
- *Naval Academy Women's Club Scholarship* – This provides for an annual four-year scholarship of $1500 which is allocated as follows: $500 in freshman year; $400 in sophomore year; and $300 in both junior and senior years. The recipient must be the daughter or stepdaughter of a Naval Academy faculty member, or of a Regular Navy or Marine Corps officer on active duty, in a retired status or deceased.
- *Marianas Naval Officers' Wives' Club* – This club provides $500 a year to a dependent of an officer or an enlisted man of the Regular Navy or Marine Corps serving on active duty, retired with pay, or deceased in line of duty or after retirement. The grant must be used for education at or beyond the college level, and is awarded to an applicant considered most worthy on the basis of merit and scholastic promise. The money may be awarded to one individual, or be divided between two individuals at the discretion of the Selection Committee.
- *The Dolphin Scholarship*—This award, for $350 annually, is being made available by the Submarine Officers' Wives' Club. The recipient must be a son or daughter (natural, adopted or stepchild) of a member of the submarine service who has served at least five years in the submarine force since qualification. This includes sons and daughters of retired, Reserve, or deceased members of the submarine service, as well as sons and daughters of those on active submarine duty. The minimum time period of five years' submarine service following qualification does not apply in cases where the submariner died on active duty in the submarine force.
- *Bainbridge Officers' Wives' Club Scholarship* – For the school years of 1961-62 and 1962-63, the Bainbridge Officers' Wives' Club, Bainbridge, Md., will award $250 per year, for education at the college level, to an applicant deemed most worthy on the basis of need, scholastic standing, character and leadership. An applicant must be a dependent of an officer or an enlisted man of the Regular Navy or Marine Corps serving on active duty, retired with pay or deceased in line of duty or after retirement. Other factors being equal, preference will be given to the dependent of someone who is or has been stationed at the Bainbridge Naval Training Center.

All-Navy Cartoon Contest
Charley Wise, HMCA, USN.

"Now we know why your feet hurt so badly. You're wearing your shoes on the wrong feet."

If you have a son or daughter who is interested in one or more of these scholarship awards, you should contact the Chief of Naval Personnel (Attn: Pers-G221) for application forms. When writing, make sure you specify the scholarships for which they wish to compete.

IN ADDITION TO the above awards, the following schools or groups also offer scholarships for financial assistance to sons and daughters of military personnel. These awards are not supervised by the Chief of Naval Personnel. For information write directly to the individuals named in each case.

- *Valley Forge Military Academy Scholarship*—The Valley Forge Military Academy offers eight scholarships a year to sons of Regular officers of the armed forces who have high academic standing and an interest in military life. These scholarships are awarded for a three-year period in the amount of $1015 per year. This is about half the all-inclusive tuition rate at Valley Forge. The applicant must be either a boy between 14 and 16 years of age preparing to enter the 10th grade who will continue on at Valley Forge to receive his secondary school diploma, or a young man preparing to enter the 12th grade who will receive his secondary school diploma and continue at the Academy for two years of junior college. Entrance to the Academy is by written examination. Applications should be directed to The Registrar, Valley Forge Military Academy, Wayne, Pa.

- *Culver Military Academy Scholarships* — This, too, is open only to sons of military personnel. Information may be obtained from Major General Delmar T. Spivey, USAF (Ret.), Superintendent, Culver Military Academy, Culver, Ind.
- *Jango Scholarships*—Daughters of commissioned officers in the U. S. armed forces who live in the Washington, D. C., area are eligible for this one. Write to Mrs. Evelyn M. Hemenway, Executive Secretary of Jango, 1112 20th Street N. W., Washington, D. C.
- *Mount Vernon Seminary*—This school grants, to the daughters of officers and of widows of officers of the Regular Navy, Marine Corps, Army, Air Force and Coast Guard, a reduction of 10 per cent in tuition fee for both boarders and day scholars. Further information may be obtained from Mount Vernon Seminary and Junior College, 2100 Foxhall Road N.W., Washington, D. C.
- *Massachusetts Institute of Technology* — Not more than 10 sons a year of Regular Army, Navy, Marine Corps and Coast Guard officers will be admitted as undergraduate students to this Institute at half the regular tuition. Those considered must be recommended by the Faculty Committee for Undergraduate Scholarships. Write to Dean of Freshmen, Massachusetts Institute of Technology, Cambridge, Mass.
- *Society of Sponsors of the United States Navy* — This group awards one or more scholarships annually, to sons of deceased or retired Navy and Marine Corps personnel, for one academic year at a preparatory school for the U. S. Naval Academy. Write to Mrs. George R. Weaver, 3709 N. Woodstock, Arlington, Va., for further information.
- *Daughters of the Cincinnati* — Daughters of military personnel are eligible. More information may be obtained from Mrs. Bronson Trevor, Scholarship Secretary, Daughters of the Cincinnati, 953 Fifth Avenue, New York 21, New York.
- *Admiral Nicoll Ludlow Scholarships*—Sons of commissioned officers in the Navy should write to St. Paul's School, Concord, N. H., and daughters of commissioned officers of the U. S. Navy may get more information from Emma Willard School, Troy, N. Y.
- *St. Margaret's School* — An annual tuition scholarship of $325 is available to daughters of members of the naval service (active, retired or deceased). Write to St. Margaret's School, Tappahannock, Va., for more information.

Many other schools, colleges and universities, quietly and without publicity, also give financial help to children of Navy and Marine Corps personnel. This help is based primarily on evidence of financial need, but in addition may be dependent on scholastic records, character or leadership.

Some further information about these scholarships may be obtained from SecNav Inst. 1755.5.

WHAT'S IN A NAME

Log Book

It probably isn't likely but in case you should ever get the urge to build a logbook here's how to go about it: Cut some shingles from a log, write something on them, then hinge them so they open like a book. The result would be, literally, a logbook.

This, according to some versions of the story, is how the records of early sailing ships were kept. The name logbook stuck through the years, and now applies to an official journal maintained at sea. This explanation seems logical. Too logical; therefore only partly correct.

It's probable that a more accurate description of the origination of the logbook would link it with the old systems of determining a ship's speed. Originally, a small "log" or chip of wood, would be tossed overboard from the bow and watched to see how long it would take to pass the stern. Since the length of the ship was known by those who did the figuring, it was possible to calculate how long the log took to pass a given point. This showed, more or less, how fast the ship was going.

By the 16th Century, this method had been improved considerably. A line was attached to a chip log, which also had been weighted at one end with lead so that it would remain upright and stationary in the water. The line was divided into sections, called knots. (Knots were actually tied in the line at first, but, in later years, pieces of cord worked in between the strands became standard.) The number of knots that ran off the log reel held aboard the ship in 28 seconds (timed with a sand glass) showed the number of nautical miles the ship traveled in an hour. The distance between the knots (47 feet 3 inches) bore the same ratio to a nautical mile as 28 seconds does to an hour.

The log, or speed of the ship in knots, was then written on a piece of board known as the log board, and the records were later entered in a book — the logbook. In time, this was shortened to log.

Today, for general purposes, the log of a ship contains the official record of the ship's activities along with observations on weather and sea conditions and navigational data. It gives a complete chronological history of the ship from the time she is first commissioned until she terminates her seagoing career. The navigator has over-all responsibility for the preparation and care of the log, which is usually referred to as the deck log on ships of the U. S. Navy.

Other logs are also maintained. The engineering log, for example, is a complete daily record, by watches, of important events pertaining to the engineering department and the operation of the ship's propulsion plant. Then there's the engineer's bell book — a chronological record of orders which pertain to the speed of the engines. This is used in preparing the engineering log.

The quartermaster's notebook is another chronological record of events occurring during the watch. It is also a "work sheet" type of log, used in preparing the deck log. You might say it's a log's log.

You'll Find Hot Springs Along with Glaciers on Iceland Duty

IF YOU RECEIVE ORDERS for a tour of duty at Keflavik, you will be a member of the Iceland Defense Force, a joint Navy and Air Force Command which forms a link in the NATO defense system. The naval component (naval station) is the host service at the airport, operating the base and maintaining a majority of the facilities for the use of all.

Keflavik is an international airport (not a naval base), operated jointly by the Icelandic government and the United States. During your tour you are subject not only to the UCMJ but to the laws of Iceland as well. You are subject to trial in the local courts of law. Under the agreement between the United States and Iceland, the governments of the two countries have concurrent jurisdiction over all Americans on Keflavik airport and the "Agreed Area." The Agreed Area, broadly speaking, is the area used by the defense force in Iceland.

On the airport and the Agreed Area, you will find Icelandic policemen patrolling the roads and guarding the gates to the bases. They are usually accompanied by Shore Patrolmen or Air Police. These Icelandic policemen usually understand English and speak it with a fair degree of fluency.

Iceland, with an area of some 40,000 square miles, is somewhat larger than Ireland. After Greenland and Britain, it is the largest island in the Atlantic. However, with a population of only 170,000 it is one of the smallest nations.

It is a land of glaciers, geysers and hot springs – a land of extreme contrasts, of frosts and fires. Snow-covered mountain tops cover boiling volcanoes and, though located just south of the Arctic Circle, there is less ice than the name implies.

The island compares with the state of Kentucky in land area; however, only one quarter of it is habitable. Iceland's population is settled in the coastal area, with one third of its population in the vicinity of Reykjavik, the capital city. Akureyri, in the north, is the second largest city; its population numbers 8000.

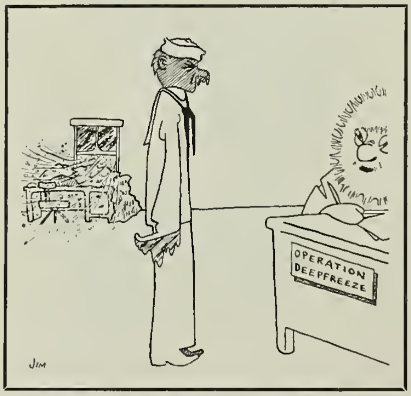
Iceland's climate is milder than you would suppose, but the island is subject to rapid weather changes and high velocity winds. Warmed by a branch of the Gulf Stream which nearly encircles the island, the mean average temperature of Reykjavik, 39° F., is higher than that of New York City.

Owing to her northerly latitude, Iceland's day varies extremely with the seasons. During the summer months when the sun is nearer the North Pole, the days grow longer until they merge into a period of continual light during June and July. In December, there is less than five hours of light each day.

The tour of duty is one year for single officers and enlisted personnel and for married men not accompanied or joined by their dependents. The tour for all personnel with dependents on station is two years.

Money Conversion – Conversion of American currency to Military Payment Certificates (MPCs) is made in the Air Terminal Building shortly after arrival. All purchases in the Exchange and concessions are made with MPCs. All transactions with Icelandic establishments and Icelandic nationals, on and off the airport, are conducted in kronur, the Icelandic monetary unit of exchange. Present exchange rate is one U. S. dollar for 38 kronur. The American Express Company office at the airport is the only place where MPCs may legally be exchanged for kronur.

Uniforms and Civilian Clothing – In accordance with the terms of the agreement between the governments of the United States and Iceland, the uniform is normally worn by all military personnel. However, civilian clothing may be worn by military personnel on base during off duty hours. The clubs on station require dress uniform or proper civilian dress (suit coat and sport or dress shirt) after 1800. Uniforms are worn off base except when personnel are actually engaged in sports and recreation such as fishing, picnicking and hiking.



"Do you mind if I close the window, Chief?"

Complete winter uniforms are essential, and the summer uniform is optional during the warmer season. The winter service uniform is, however, an excellent working uniform, even during the summer months. Civilian clothing appropriate for the Icelandic climate would be about the same as one would normally wear during fall, winter and spring in New York and New England. Arctic clothing, including foul weather gear and parka type outer clothing, is issued upon arrival.

Housing on and off Base – Family, or government housing at Keflavik airport is limited and available only on a rank and seniority basis. Advance approval must be obtained from the Commander, Naval Forces Iceland, for dependents.

On-base housing consists of one-, two- and three-bedroom apartment units. These are furnished with stove, refrigerator, rugs, bedroom, living room and dining room furniture and miscellaneous items. Washers and dryers are furnished on a "share with others" basis.

The weight allowance for household goods is subject to the usual limitations. Only minimum furnishings should be shipped. Essential items which you will need include kitchen utensils, electrical appliances, dishes, silverware, linens, equipment needed for infants and small children and items for personal family use. Only limited supplies of these items are available through the Exchange. American-made electrical appliances, television sets and radios may be used without conversion. No facilities exist for the use of gas appliances.

Owing to the limited number of government-owned family quarters available, concurrent travel of dependents is not authorized. Quarters are allocated on the basis of rank and/or rate and date of application. At present, only CPOs and LCDRs and above have much likelihood of obtaining quarters for dependents on station. The only temporary accommodations on base are in the Keflavik International Airport Hotel. Because of space limitations, use of the hotel is limited to transient military personnel and commercial guests.

Some dependents have joined their husbands while on a tourist visa with varying degrees of satisfaction. Normally the Icelandic government will not grant tourist visas to dependents of military personnel for a period longer than one month. After dependents arrive in Iceland and obtain a domicile off the base, application may be made to the Icelandic authorities for an extension of the visa. There appears to be no set policy in the granting of visa extensions, but current practice indicates that extensions are normally granted in periods of 90 days. There is no assurance that visas will be extended and the military takes no cognizance of such matters.

Civilian housing standards are lower than normally expected for the rental rates charged. Rentals range from $65 to more than $100 per month, depending on size and conveniences. In many cases, baths and/or kitchens must be shared with other tenants. Although dependents living off station are entitled to commissary privileges, Icelandic customs regulations prohibit taking food off the base. Prices of food off-base are high, usually two or three times stateside prices and the foods generally available differ from those to which most Americans are accustomed. Fish, sheep and dairy products are plentiful and excellent. Beef, pork, vegetables and fruits are rare and, when available, expensive.

Private Autos — Private cars are accepted for shipment in accordance with current BuSandA instructions. The usual waiting period is approximately one month from the date of delivery to the shipping port in the United States. No tax is imposed on cars shipped on an American vessel at government expense. Icelandic liability insurance is required on all private autos. The minimum coverage required is 500,000 kronur, which costs approximately $60 per year. Icelandic license tags are also required.

It is suggested that you ship a sound, older car. Road conditions and lack of garaging facilities cause rapid depreciation and deterioration of cars. Most roads are unpaved, rutted and made of rough lava rock or gravel. Spare parts are in limited supply on the base through the Exchange and auto repair hobby shop. Parts are usually available for the most popular makes in Reykjavik, but prices are high. Icelandic laws require chains or snow tires when there is snow or ice on the roads.

Passes — Four types of passes — liberty, recreation, special and official duty passes — are used. Liberty passes are granted on a quota basis, subject to rigidly enforced curfew hours. The curfew is 2200 every evening except Wednesday, when it is 2400. A reasonable amount of time is allowed for personnel to return to the base, up to two hours after curfew. Military personnel must, however, be off the streets and out of public places by curfew.

Medical Facilities — Medical and dental care is provided for all personnel. The hospital has facilities to

WAY BACK WHEN

The Sailor and the General

The formal surrender of Japan to the Allied powers, which took place on board USS *Missouri* (BB 63) on 2 Sep 1945, is well established in history as a highlight of the 20th Century. Not so well known are the behind-the-scenes activities which occurred aboard *Big Mo* in preparation for the signing ceremony.

Several days before the ceremony, rehearsals were held on board. Two hundred and fifty crew members, filling in as admirals and generals, played their roles with determination. Details included practice in rendering the appropriate honors to each dignitary who would board *Big Mo*. Men in other ships in Tokyo Bay, after an initial startled reaction, soon became accustomed to the unorthodox routines being carried out aboard *Missouri*.

The day before the ceremony, a final dress rehearsal was held. At a signal, a working party of sailors was brought to *Big Mo* by launch from a nearby destroyer and a mystified young seaman in dungarees was told to climb one of the battleship's ladders and walk on board. He did not know he was standing in for General of the Army Douglas MacArthur.

As the seaman approached the quarterdeck, ADM William F. Halsey (then Commander 3rd Fleet) and *Missouri's* commanding officer, CAPT S. S. Murray, stepped forward to greet him. Guns boomed, a band blared "Ruffles and Flourishes," a double row of sideboys snapped to salute, a 90-man Marine guard of honor presented arms, a red flag with five white stars unfurled at a yardarm, and the band struck up the National Anthem.

It is not clear how "General MacArthur" reacted to this sudden recognition, but one of the more conservative reports described him as unnerved to the point of being unable to return the salute.

Despite the careful rehearsals, however, some hitches developed when it was time for the real thing. For example, ceremony planners decided that the table on which the surrender document was to be signed should have some historic significance. The British battleship *King George V*, anchored across Tokyo Bay, had on board a table that had been in the Royal Navy since the days of Sir Francis Drake (1545-1596). At considerable trouble it was brought to *Missouri*, but was found to be too small. At the last moment an ordinary mess table was substituted and covered with a green baize cloth.

Also on that historic day on board *Missouri*—the Russian delegation persisted in wandering about the ship until FADM Nimitz told them to stay put or get off; an Allied representative inevitably signed on the wrong line; it was rumored that diehard kamikaze pilots intended to crash the ship in a last suicidal gesture, so, throughout the ceremony, every antiaircraft gun was trained skyward.

Otherwise, things went smoothly. By 0900, 2 Sep 1945, all the Allied and Japanese dignitaries had taken their places on board. Then 12 signatures on a piece of paper brought to an end the war in the Pacific.

perform all types of emergency medical care, including minor surgery.

Education — A full scale education program is available. This includes University of Maryland college courses, USAFI and Navy correspondence courses. A group study plan for completing high school, GED and occupational interest testing and educational counseling are also available.

A complete grade school with grades one through 12 is available at no cost to all dependents, whether living on or off the base. The school year begins the second week in September and continues through May.

The base library offers a wide selection of books and current issues of magazines and newspapers, in addition to a selection of hi-fi and stereophonic records.

Post Office — Stamps, registered and certified mail, parcel post and air parcel post service are available. Your address will be: Name, rank or rate, unit or department, U. S. Naval Station, Navy No. 568, FPO, New York, N. Y.

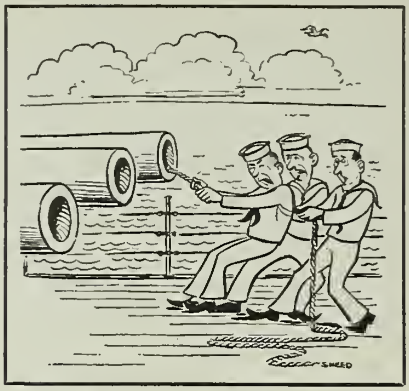
Services — Laundry and dry cleaning service is available with normal service requiring from four to seven days, depending on the workload. Finished laundry service is available.

A launderette, operated as an Exchange concession, is located just to the rear of the Exchange. Attendants are on duty, but self-service machines are also available.

Tailor, shoe, watch and radio repair shops and services are available at the airport. Time required for service and repairs varies in each case, depending on the shop workload.

Base shuttle buses operate daily to all areas at the airport. A military taxi service is available for official use only. Two commercial taxi companies operate at the airport. Commercial taxi operators must be paid in kronur. Public utility buses operate from the base Exchange and air terminal building to the town of Keflavik, where connections may be made to Reykjavik and other cities.

Operated as a concession of the base Exchange, a beauty shop is located just to the rear of the main Exchange building. Service is on an appointment basis only.



"Come on out, Joe, the MAA is gone now!"

Among the services available to newly arrived families is the temporary loan of dishes, silverware and some household appliances. Information on Iceland, travel and various other assistance and advice that dependents may need is provided in the orientation program for newly arrived personnel and families.

Commissary — A fairly wide selection is available at the commissary. Temporary shortages do occur, however, from time to time.

Exchange — A fair supply of the usual items found in Exchanges in the States is available. Supplies of civilian clothing and particularly children's clothing are limited and it is recommended that all items of this nature be purchased before reporting.

Recreation and Entertainment—Clubs have been established for officers and for enlisted personnel of every grade. Entertainment of the usual type is offered in each. The Viking Service Club is open to both officers and enlisted personnel and offers a full program of entertainment each day of the week. Special USO camp shows and Sunday and weekend tours to various places of interest on the island are two of the club's special attractions. Table tennis, pocket billiards, hand shuffleboard and cards are available. The club also has a snack bar, reading room, television and music rooms, in addition to its large auditorium and ballroom.

Sports Program—The athletic program includes most of the popular sports to be found in the States. Outdoor sports are at times limited by climatic conditions.

Of all the sports activities available off the airport, fishing is perhaps the most popular. You are in for a treat when you visit the fishing camp located about 80 miles from the airport. Three-day recreation passes are available, with transportation, food and lodgings provided.

There are two theaters on the base, showing a wide variety of films.

Base Special Services maintains auto, leathercraft, electronics, woodwork and photo hobby shops. Tools, instructors and materials are available, at most times, in all the shops excepting the auto shop. In most cases, auto parts must be ordered in advance from the States.

In addition to the tours mentioned above, military personnel and their dependents are granted one trip to the United Kingdom or Europe on authorized leave, with transportation via government aircraft, when available.

New Correspondence Courses Include Space Technology

Five new correspondence courses — three for enlisted men and two for officers — have been issued by the Bureau of Naval Personnel. Seven others, four enlisted and three officer, have been discontinued.

Enlisted courses for active duty Navymen are administered, in most cases, by the local command. Your division officer will help you select the courses best suited to your rate and training program, and will see that your application (NavPers 231) is forwarded to the Correspondence Course Center.

NEW COURSES

ECC Engineman 1 & C (NavPers 91521-C)
ECC Steelworker 1 & C (NavPers 91591-1B)
ECC Aviation Machinist's Mate 1 & C (NavPers 91599)
OCC The Communications Officer (NavPers 10403)
OCC Introduction to Space Technology (NavPers 10404)

DISCONTINUED COURSES

ECC Engineman 1 (NavPers 91520-C)
ECC Engineman C (NavPers 91521-B)
ECC Steelworker C (NavPers 91591-1A)
ECC Steelworker 1 (NavPers 91590-C)
OCC General Communications (NavPers 10916-A3)
OCC Merchant Ship Communications (NavPers 10917)
OCC Shipboard Communications (NavPers 10918-2)

Summary of Legislation Enacted into the Law During Past Year

An annual roundup of legislation acted on by Congress during 1961 includes bills which may sooner or later affect your paycheck, the length of your Navy hitch, your family's protection after your death, or the amount of duty-free goods you may bring home from overseas.

The main "service" bills of the 87th Congress, signed off as Public Laws by the President, include:

PL 87-117 – Grants the President authority to call up to 250,000 Ready Reservists and to extend some terms of service up to 12 months.

PL 87-188 – Permits service men to authorize advance payments of basic pay to dependents ordered to evacuate overseas areas in an emergency.

PL 87-145 – Fixes flat rates of diving pay from $55 to $110 a month, depending on diver qualifications.

PL 87-374 – This is the "trailer bill" which authorizes up to 36 cents a mile for mobile home moves.

PL 87-132 – Cuts duty-free allowance from $500 to $100 when you return from overseas.

PL 87-84–Extends home loan programs for World War II veterans to 26 Jul 1967, and to 1 Feb 1975 for Korea veterans.

PL 87-207 – The "forgiveness bill" applies to you only if you, in good faith, received a family separation allowance between February and September 1956, when the allowance was withdrawn. If you accepted, you will not be required to repay the government, and if you already paid back part (or all) of the allowance, you may ask for a refund. Applications for refund must be made within one year.

PL 87-103 – Changes the Career Compensation Act to read "three months" instead of "90 days." (Many men missed out on reenlistment bonuses when they shipped over on the 91st or 92nd day following release.) The law is retroactive. Applications must be made within one year.

PL 87-164 – Provides that the allowances for transportation specified under the Career Compensation Act be uniform for all Reservists, active or inactive.

PL 87-381 – Broadens the coverage under Uniform EP Services Contingency Option Act (renamed Retired Serviceman's Family Protection Plan). An 18-year cutoff rule is modified to permit an option election to be made three years before retirement; a new provision allows you to make an election with less than 18 years service; waiting time for changes or revocations is reduced from five to three years; and withdrawal is provided in cases of severe financial hardship.

PL 87-140 – Authorizes the shipment of household effects of retired members to locations other than those originally selected, provided the members pay any excess charges above the original cost.

PL 87-102 – The end of military duty becomes effective on midnight of the day of discharge.

PL 87-53 – Authorizes $13 billion for the procurement of aircraft, missiles and ships for fiscal 1962.

PL 87-118 – Provides additional funds for the improvement of non-nuclear capabilities of ground forces, increased air and sea lift strength and an expanded antisubmarine warfare program.

PL 87-57 – Provides $831 million for the construction and improvement of military bases at home and abroad, including missile sites and nuclear submarine bases.

PL 87-385 – Amends the Uniform Code of Military Justice by removing some of the problems in pleading or proving bad check cases.

PL 87-109 – Provides that NROTC graduates be treated the same as Naval Academy graduates in that they will be continued on active duty as Regulars after completing their obligated tours, unless they specifically ask to be shifted to Reserve status and inactive duty.

PL 87-391 – Increases the reemployment protection of men extended or called up from the Reserves. (Amendment to Universal Military Training and Service Act.)

PL 87-201 – Authorizes $150,000 for completion of the Pacific War Memorial on the hulk of USS *Arizona* (BB 39) at Pearl Harbor.

ECC Assignment Booklets Will Be Distributed Locally

That correspondence course assignment booklet you'd like to use in studying for advancement in rating will be easier to obtain from now on. You'll be able to get hold of it a lot faster, too.

This happy state of affairs has

WHAT'S IN A NAME

Navy's Most Fired Gun

There is a gun at the Fleet Anti-Air Warfare Training Center, Dam Neck, Va., which bears the unimaginative designation of Mount 51.

It may be the most fired gun in the Navy, if not the world.

Many of its parts have been worn out and replaced piece by piece several times. It has had, for instance, 12 gun barrels from which 49,650 rounds of 5-inch ammunition were fired — all for the purpose of training ship's gunnery crews.

If all this ammunition were gathered together and weighed, it would amount to 1520 tons of projectiles and 415 tons of powder — enough to fill 244 semi-trailers.

Mount 51 has had quite a role in making Navy gun crews better marksmen.

About 1210 gun crews have trained on Mount 51. At 17 men per crew, this figures out to 20,570 men who have taken part in firing the gun.

These Navymen may be sorry to hear that repair bills were running too high on their old alma mater, so the Navy traded her in on a new model.

A dismantling crew disconnected her electrical leads, removed the barrels and shield, and hauled her away.

Now a new Mount 51 stands ready to train Navy gun crews. Old Mount 51 was taken to the salvage section of the Norfolk Naval Shipyard to await its disposal.

resulted from a change in distribution methods, announced recently in BuPers Notice 1552 of 2 Nov 1961. According to the Notice, correspondence course administering commands, which have maintained their own supplies of Navy Training Course texts since 1958, will henceforth be provided an initial supply of the associated assignment booklets.

The new system will eliminate the time lag which occurred in the past between actual application for the course and receipt of the assignment booklet through the mail.

Here's how it will work.

Each administering command will be shipped an initial supply of the assignment booklets direct from the printer – the quantity depending on the command's allowance and onboard strength. A destroyer, for example, might be provided with an initial issue of five assignment booklets for a particular course. When a crew member applies for that course, he can be issued a text and assignment without delay. When replenishment is necessary, assignment booklets will be obtained as in the past, by forwarding completed NavPers 231 forms to the Naval Correspondence Course Center, Scotia 2, N. Y. A form must be forwarded for each assignment booklet desired; the Center will not honor requisitions for bulk quantities of booklets.

The new system applies only to active-duty Navymen. Inactive Reservists will continue to obtain their courses by individual application to the Naval Correspondence Course Center, Scotia 2, New York.

QUIZ AWEIGH ANSWERS

1. (a) Keep your right foot in place and remain silent, but you are allowed to shift your weight and move your left foot.
2. (b) Keep your right foot in place, but you may talk.
3. (a) Form ranks and stand at attention.
4. (a) The left foot.
5. (c) As either foot strikes the ground.
6. (c) Flex and unflex muscles, shift weight, but do so in a way that onlookers can't detect.

Quiz Aweigh may be found on page 45.

Medicare Provides Treatment For Dependent Parents At Military Medical Facilities

Does the Navy foot the medical bills of dependent parents? Yes, if treatment is performed by service doctors at military medical facilities. No, if treatment is handled by civilian doctors, or at civilian hospitals.

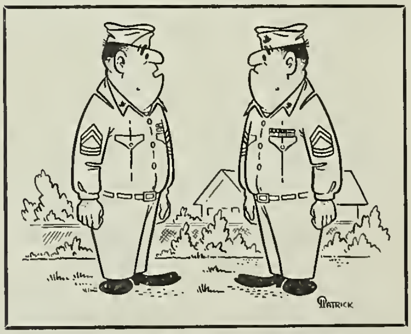
The Medicare (Dependents Medical Care) program provides treatment through civilian hospitals for spouses and children of active duty personnel, who do not have access to military dispensaries or hospitals.

Medicare does not provide this civilian treatment for dependent parents (or parents-in-law). They may be treated at government expense only at uniformed services medical facilities.

But, before a dependent parent, or any dependent, is treated at a service facility, he or she must possess a Uniformed Services ID and Privilege Card (DD Form 1173).

It is not necessary for dependent parents actually to reside with you to be eligible for treatment. By providing them with more than one-half of their income, you are considered to be maintaining their home. (A dependent parent or parent-in-law is one who receives more than one-half of his or her support from the active-duty Navyman or woman, who resides in the household of the active-duty member. For Medicare eligibility, however, the "reside in household" requirement is fulfilled when the parent resides in a dwelling place "provided or maintained" by the service member.)

BuPers Inst. 1750.5B, the official Dependent's ID Card guide, lists dependent parents' Medicare privileges. This directive could be worth its weight in money – your money – if your dependent parents ever require medical treatment. It doesn't say it in so many words, but this is made pretty clear: If your dependent parents go to a civilian doctor, you will foot the bill.



"You sure we haven't met before? . . . You sure look familiar to me!"

List of New Motion Pictures and TV Series Available to Ships and Overseas Bases

The latest list of 16-mm feature movies and TV series available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Two one-hour TV shows are packaged together for a 108-minute program, but may be shown only aboard ship. TV series – all westerns – available for selection are: *Rawhide, Stagecoast West* and *Wagon Train.*

Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

Motion Pictures

Snowwhite and the Three Stooges (1823) (C) (WS): Comedy; Carol Heiss, Three Stooges.

Everything's Ducky (1824): Comedy; Mickey Rooney, Jackie Cooper.

The Trunk (1825): Melodrama; Phil Carey, Julia Arnall.

Two Rode Together (1826) (C): Drama; James Stewart, Shirley Jones.

The Big Gamble (1827) (C) (WS): Comedy - Drama; Stephen Boyd, Juliette Greco.

Twenty Thousand Eves (1828): (WS); Melodrama; Gene Nelson, Merry Anders.

Unstoppable Man (1829)): Drama; Cameron Mitchell, Marius Goring.

Weekend with Lulu (1830): Comedy; Bob Monkhouse, Leslie Phillips.

Fanny (1831) (C): Drama; Leslie Caron, Maurice Chevalier.

Morgan, the Pirate (1832) (C) (WS): Melodrama; Steve Reeves, Valerie Lagrange.

Honeymoon Machine (1833) (C) (WS): Comedy; Steve McQueen, Brigid Bazien.

Invasion Quartet (1834): Comedy; Bill Travers, Spike Milligan.

Bridge to the Sun (1835): Drama; Carroll Baker, James Shigeta.

The Pit and the Pendulum (1836) (C) (WS): Drama; Vincent Price, Barbara Steele.

Alakazam, the Great (1837) (C) (WS): Cartoon-Feature.

Twenty Plus Two (1838): Melodrama; David Janssen, Jeanne Crain.

Television Programs

5196: TV-1 *Rawhide* — Incident of the Dry Drive. TV-2 *Stagecoach West* — The Land Beyond.

5197: TV-1 *Rawhide* — Incident of the Dangerfield Dip. TV-2 *Stagecoach West* — The Storm.

5198: TV-1 *Rawhide* — Incident at Buffalo Smoke House. TV-2 *Stagecoach West* — Three Wise Men.

5199: TV-1 *Rawhide* — Incident of the Stalking Death. TV-2 *Stagecoach West* — The Bold Whip.

5200: TV-1 *Rawhide* — Incident at Spanish Rock. TV-2 *Stagecoach West* — Never Walk Alone.

5201: TV-1 *Rawhide*—The Deserter. TV-2 *Stagecoach West* — The Renegades.

5202: TV-1 *Rawhide* — Incident of the Blue Fire. TV-2 *Stagecoach West* — The Dead Don't Cry.

5203: TV-1 *Rawhide* — Incident of the Calico Gun. TV-2 *Stagecoach West* — A Fork in the Road.

5204: TV-1 *Wagon Train* — The Bleymier Story. TV-2 *Stagecoach West* — Come Home Again.

5205: TV-1 *Wagon Train* — The Candy O'Hara Story. TV-2 *Stagecoach West* — By the Deep Six.

5206: TV-1 *Wagon Train* — The Roger Bigelow Story. TV-2 *Stagecoach West* — Image of a Man.

5207: TV-1 *Wagon Train* — Path of the Serpent. TV-2 *Stagecoach West* — Root of Evil.

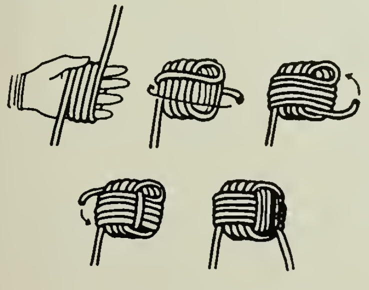
5208: TV-1 *Wagon Train* — The Sam Elder Story. TV-2 *Stagecoach West* — Songs My Mother Taught Me.

5209: TV-1 *Wagon Train* — The Earl Packer Story. TV-2 *Stagecoach West* — The Brass Lily.

5210: TV-1 *Wagon Train* — The Christopher Hale Story. TV-2 *Stagecoach West* — A Place of Still Waters.

5211: TV-1 *Wagon Train* — The Nellie Jefferson Story. TV-2 *Stagecoach West* — The Swindler.

Grains of Salt —



STEPS IN TYING A MONKEYS FIST

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 48 — Authorized 10 November as an alternate day for observance of Veteran's Day.

No. 49 — Directed that issue and use of certain drugs be suspended.

Instructions

No. 1301.34A — Issues instructions concerning use of Officer Data Card (NavPers 2626) (Rev 10-61).

No. 1426.1B — Advises line and staff officers, who hold permanent USN commissions, of qualifications which must be met and procedures involved before permanent promotion to lieutenant (junior grade).

No. 1640.5C — Announces revised criteria for designation of the place of confinement for persons sentenced to confinement by courts-martial.

Notices

No. 1416 (20 October) — Cancelled BuPers Inst. 1416.7, which is concerned with physical examinations, for promotion, of Navy and Marine Corps officers on active duty.

No. 1552 (2 November) — Described new procedures that will be followed in distributing many enlisted correspondence course assignment booklets to Navy commands that administer these courses for their active-duty enlisted personnel.

No. 1440 (3 November) — Announced to personnel in the BT rating the advantages to be achieved by a change of rate to the Boilermaker (BR) rating.

No. 5390 (9 November) — Explained how to request and use the services of a leadership field team.

No. 1430 (9 November) — Announced the names of those who will be advanced in rating to senior and master chief petty officer.

No. 1080 (20 November) — Advised commands of procedural changes in the NMIS (Naval Manpower Information System) and in the enlisted personnel accounting system.

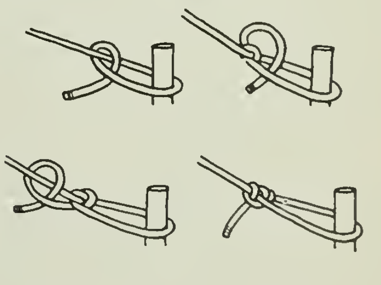
No. 1418 (20 November) — Announced the schedule for Navy-wide advancement examinations for enlisted personnel to be held in February.

Films and Slide Presentations on Seapower Available To Ships, Stations, Civic Groups

Several years ago the Office of the Chief of Naval Operations commenced giving wide distribution to the annual visual presentation prepared to supplement the testimony of the Chief of Naval Operations before the Congress. Naval personnel, civilian employees of the Navy, and members of civic organizations throughout the country are able to obtain a current understanding of the role of the United States Navy in support of our government's foreign policy. The Office of the Chief of Naval Operations now has an expanded program to provide visual aids for telling the Navy story.

The latest slide presentation, ***New Frontiers for Sea Power***, explains how seapower continues to be a mighty instrument of national policy, as it has been for seagoing nations down through the centuries. The presentation reviews the mobile ships and planes of the Fleets, and shows how they are utilized to apply exactly the precise force needed to support United States foreign policy in trouble spots around the world. The

Grains of Salt —



STEPS IN TYING A TAUT-LINE HITCH

role of the *Polaris* submarine and a preview of the Navy of the future are also included.

To help inform America about what lies beneath the surface of the seas, a 35mm color-slide presentation, ***The Conquest of Inner Space,*** points out some startling and interesting facts. For example, the mineral and food resources under the sea are of increasing importance in solving the economic problems of the future. The National Education Association has publicized the presentation for use in high schools. It is interesting to anyone who desires to learn more about the mysteries of the deep and recent scientific revelations.

In addition to the color-slide presentation, a special series of films has been prepared. These films provide general information and increased understanding within the naval service and among civilian groups. They are excellent means to help naval personnel (military and civilian) understand the importance of their individual contributions. The films are excellent aids to naval speakers asked to appear before the general public.

Two of the latest films in the series have been well received by all types of audiences.

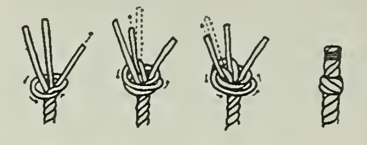
Summer Incident (MN-8982) is a 27-minute, 16mm color motion picture. It shows how United States seapower helped stabilize cold war crises and local crises that have occurred throughout the world.

Mr. Push-a-Button (MN-9483) is also a 16mm motion picture, in color. Most of the 28-minute film was made aboard the guided missile cruiser USS *Canberra* (CAG 2). It points out that man is still the indispensable ingredient in weapons systems of the machine-age Navy.

Among the other 16mm color films in the series are:

- ***Sixth Fleet — Force for Peace*** (MN-8529) – This film, about 55 minutes long, is a story of the Sixth Fleet in the Mediterranean and its role as ambassador and keeper of the peace.
- ***The Growler Story*** (MN 8679) – This film (running time, 20 minutes) tells of CDR Howard Gilmore's heroic command: "Take her down." With it, Commander Gilmore sacrificed his life to save his submarine and its crew during World War II.

Grains of Salt —



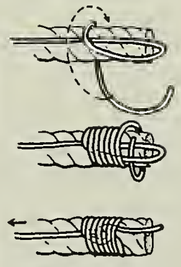
STEPS IN TYING A DOUBLE MATTHEW WALKER

- ***Operation Sunshine*** (MN 8936) – Portrayed in this film is the history-making voyage of USS *Nautilus* SS(N) 571, as she pioneered a new Northwest Passage under the North Pole: Running time, 27 minutes.
- ***Security Through Seapower*** (MN 8864) – A carrier launches two high-performance jets in the Pacific, off California, and less than four hours later the planes have spanned the continent to land on another flattop in the Atlantic: Running time, 11 minutes.
- ***Navy Wives*** (MN 8794) – This 27-minute film is dedicated to the distaff side of the Navy family.
- ***Silent Sentinel*** (MN 9439) – This is a 15-minute report on the development of the *Polaris* missile, which became operational in our nuclear-powered submarines in 1960.

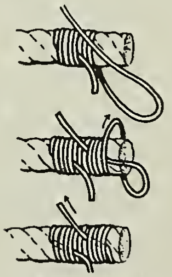
These visual presentations are some of the materials given wide distribution by the Office of the Chief of Naval Operations. Copies of the films *Summer Incident, Navy Wives,* and *Mr. Push-a-Button* have been distributed through the Fleet Entertainment Motion Picture Exchange and to a large number of naval activities. The remainder of the films and slide presentation may be obtained from appropriate naval district training aids sections or film libraries on a temporary basis.

Naval representatives visit civic groups upon request, make presentations and, if desired, conduct discussion periods.

Grains of Salt —



STEPS IN TYING A "PLAIN" WHIPPING



STEPS IN TYING A "SAILOR'S" WHIPPING

Best Messes Ashore and Afloat Are Preparing to Prove It to Ney Committee

Now is the time for all good mess cooks to prove they have the best mess in the Navy.

Each year, at about this time, BuSandA accepts nominations for the Captain Edward Francis Ney Awards for the best general messes afloat and ashore.

Here's how the machinery works: Each type commander, each overseas area and force commander and every district and river command commandant nominates the command under his jurisdiction which, in his judgment, has the most outstanding food service.

The nominations must be in the hands of the Chief, Bureau of Supplies and Accounts (Code S10) not later than 1 May.

An awards committee composed of Navy line, medical and supply corps officers and representatives of the Food Services Executives Association will meet in Washington during the first half of May to select three finalists for each of the afloat and ashore categories. The selections will be made on the basis of established guidelines.

The Ney Awards Committee then visits the six finalists during the first half of June to make a final evaluation. Winners will be announced around the end of June.

Judging will be based on three general areas, each of which is divided into several parts.

The first area – efficiency of food preparation, is broken down into menu planning, preparation of food, acceptability of food and efficiency of serving techniques.

The second area – sanitation, includes general sanitation, scullery cleanliness and care of equipment.

Area three – management, is divided into conservation practices, training and supervision.

The Ney Awards program was established in 1958.

This year's program is again being sponsored by the Food Service Executives Association. Awards will be made in each category to the best general mess and runner-up at the association's August convention.

Full details concerning the contest are published in BuSandA Notice 5061 dated 20 Oct 1961.

First Year of STARs Program Was a Huge Success

More than 6500 men reenlisted under the Navy's STAR Program during its first year of operation. At the time of reenlistment, the average STAR reenlistee had two and one-half years of service.

Of the 6500 reenlistees, 74 per cent were in critical ratings. The list below shows the number of men in each rating who have reenlisted under the STAR program during its first year (September 1960 through September 1961). Critical ratings under STAR are marked with an asterisk:

RATE	E-3 Strikers	E-4	E-5	TOTAL
BM	4	2	—	6
QM	1	4	1	6
SM	1	2	4	7
*RD	35	101	48	184
*SO	30	98	26	154
TM	20	45	7	72
GM	4	27	1	32
*NW	13	11	7	31
*FT	19	79	31	129
*GS	18	23	10	51
MN	—	2	—	2
*ET	61	182	66	309
IM	2	2	1	5
OM	2	4	2	8
*RM	121	274	75	470
*CT	28	103	37	168
YN	26	94	15	135
PN	1	31	7	39
MA	—	1	—	1
SK	4	15	3	22
DK	5	3	—	8
CS	3	12	1	16
SH	4	1	—	5
JO	3	5	4	12
PC	1	—	—	1
LI	—	1	1	2
DM	4	11	1	16
MU	—	—	—	—
*MM	62	154	39	255
EN	5	56	16	77
*MR	4	26	8	38
*BT	16	201	35	252
BR	—	—	—	—
*EM	61	182	67	310
*IC	50	120	31	201
SF	1	30	4	35
DC	1	12	—	13
PM	—	1	1	2
ML	—	—	—	—
SV	—	—	—	—
EA	—	3	—	3
CE	—	2	—	2
EO	1	6	1	8
CM	—	4	—	4
BU	—	3	—	3
SW	—	2	—	2
UT	1	4	2	7
*AD	15	220	25	260
*AT	50	225	145	420
*AO	2	36	15	53
*AQ	10	52	23	85
AC	6	25	8	39
AB	4	13	4	21
*AE	42	141	60	243
AM	24	127	29	180
*PR	13	27	8	48
AG	16	17	10	43
TD	19	40	8	67
AK	8	5	—	13
PH	2	21	5	28
*PT	1	1	1	3
HM	4	45	9	58
DT	—	7	1	8
SD	—	—	—	—
TOTALS	828	2941	903	4672

Non-petty officers who were not designated strikers also reenlisted under the STAR program during the year:

SA/SN–795, FA/FN–418, CP/CN–4, AA/AN–568, HA/HN–39, DA/DN–9, TA/TN–2: Total 1835.

In all, 6507 men reenlisted under the STAR program in one year.

The STAR Program enables selected first-cruise enlisted personnel with at least one year of active duty to be discharged for immediate reenlistment for either four or six years. In return for this, the Navy gives these benefits:

- Guaranteed assignment to Class A school of choice.
- Automatic advancement from pay grade E-3 to E-4 for those who graduate from Class A school in the upper half of their class.
- Guaranteed assignment to Class B school for PO3s and PO2s.
- Automatic advancement to PO2 for PO3s who graduate from Class B school.

Full information on the STAR Program may be found in BuPers Inst. 1133.13.

Snook's Successor Is New Atomic-Powered Sub

USS *Snook* SS(N) 592, the Navy's 21st atomic-powered sub and the second sub to bear the name, was commissioned in November.

Seven crewmen of the first *Snook* were on hand to see the second join the Navy.

Snook is a *Skipjack*-class submarine which can dive to depths of more than 400 feet and attain speeds of more than 20 knots.

HERE'S YOUR NAV

The Office of Naval Research is engaged in a project which, it is hoped, may help solve a food shortage problem in several areas of the Caribbean, and, - - at the same time - - answer some questions about the navigational instincts of turtles.

ONR recently stowed 30,000 freshly hatched green turtles in plastic bags and transported them by seaplane from a hatchery in Costa Rica (one of the few Caribbean countries with an abundance of turtles) to British Honduras, Colombia, Barbados, Grenada and St. Lucia, in the Windward Islands, and Antigua and St. Kitts in the Leeward Islands - - - all places badly in need of turtle meat. The turtle population in these areas has been diminishing rapidly, and with it goes the main source of meat for the natives. ONR will also study turtle migration habits, and perhaps discover some secrets of navigation. (Turtles are considered excellent navigators.)

The operation is based on an ONR theory that green turtles, when three years old, return to their spawning grounds to lay eggs. Scientists hope that by transplanting the turtles just after hatching, they will accept their new location as "home," and return by instinct. As a result, natives will eventually have an abundance of meat for the first time in years.

Also, ONR will attempt to discover the clues turtles use in navigating thousands of miles to sea and back to their hatching ground, and how turtles spawned far inland unerringly find their way to the sea they have never seen.

All this may contribute to a long range program in biological orientation through which the Navy hopes to improve navigation and detection devices.

BOOKS

FROM RIVER BOATS OF CIVIL WAR TO PT BOATS OF WORLD WAR II

HERE IS A SELECTION from the latest list of new books available to your ship or station library.

Our Modern Navy, by CAPT Joseph L. Howard, USN, tells how the United States is proceeding toward a fuller use of the sea in American interests and in the cause of freedom throughout the world. It describes the wide range of interests of the Navy, its broad strategic scope, its needs and its prime significance to the security and influence of the United States. The author portrays the Navy as more than just ships, guns, planes, missiles, space satellites, and hardware as he tells of the men and women who are members of the service. Navymen will find the combat elements of their branch and specialty presented in perspective to show that the Navy's success in modern warfare depends upon a fine balance between many different talents and disciplines.

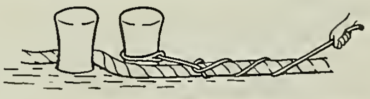
PT 109, by Robert J. Donovan, is much different. In a sense, it tells just how minute elements of this power are applied in time of war. It is, of course, the story of President Kennedy's experience as a wartime skipper of a PT boat, but it can be read with pleasure as a straight adventure yarn of the this-is-how-it-really-was genre. Told in smooth reportorial style, the story picks up at the point where LTJG Kennedy arrives at Guadalcanal during an air raid as a green young skipper and carries the yarn along until he is surveyed out of the Navy after injuries received when his PT boat is rammed and sunk by a Japanese destroyer. The story is well told, with no political overtones, with infinite, fascinating details. The portion concerning the rescue of the boat's crew after the sinking is a real hair-raiser. Firmly recommended as a good yarn.

Sir Hubert Wilkins, edited by Lowell Thomas, may not, at first, appear to be quite as gee-whiz as PT 109 but it is nevertheless an exciting, interesting piece of work. Wilkins, a South Australian who became one of the first men to fly across the Arctic, led a life rivaling fiction. A stowaway aboard a ship, he reached North Africa while still a boy, and there escaped slavery or death at the hands of Arab smugglers. After making the first motion pictures ever taken of war (in the Balkans in 1912), he went on a two-year Arctic expedition with Stefansson, then joined the Australian Army in World War I, during which he was wounded many times and buried by shellfire at one point. As you may recall, it was his ashes that CDR James Calvert, while commanding officer of *USS Skate,* scattered at the North Pole in 1959.

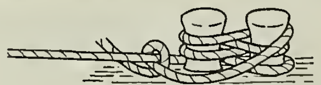
Another view of war is seen in **The Civil War at Sea** (subtitled The River War), which is Volume II of a three-volume narrative history by Virgil Carrington Jones. This volume describes the river battles from March 1862 to July 1863, when the capture of Vicksburg closed off the Mississippi and split the Confederacy in two. The names that fill these pages—Yazoo Pass and the Red River, Pumpkin Hill Channel and Galveston Bay—all represent close-fought skirmishes of considerable importance. At this stage of the war, with Southern ports rapidly being closed and her remaining railroads threatened, the inland waterways of the Confederacy became increasingly important. With a sure, professional touch, Jones tells of David Farragut, who achieved fame by capturing "invincible" New Orleans; David Dixon Porter, whose dummy ironclad caused the Southerners to destroy a ship they had just captured; and Isaac Newton Brown, who finished and commanded *Arkansas* for the Confederate Navy. History as it should be written.

At this time, books about the sea itself are almost as popular as those of the Civil War. **The Mysterious Sea,** by Lester del Rey, is another such. As he points out, although the face of the earth is more than three-quarters covered by the sea, we know far more about the moon, and even Mars, than we do about the great deeps. It is estimated that during the International Geophysical Year of 1957-58, more was learned about our oceans than in the previous 2000 years. Del Rey attempts to pass on much of the knowledge thus accumulated, plus the lives of many of the inhabitants of the sea, including the dolphin who may, according to recent tests, be more intelligent than man, even though man is the tester.

Grains of Salt —



METHOD OF SECURING MOORING HAWSER WITH A STOPPER



SECURING A HAWSER TO BITTS

Not nearly so pleasant, but quite as important professionally, is **Guerrilla War,** by Colonel Virgil Ney. This book on guerrilla warfare explains basic principles by historical examples. Ney holds to the belief that Americans have a tradition of successful guerrilla war operations from the earliest days of the nation's history. It was a military phenomenon for centuries, but it has now been seized and converted into a vehicle of Cold War combat by international communism. To defeat it, we must know what it is and how it works; to wage it, we must understand its principles.

Enough of realism. **The Game of Kings,** by Dorothy Dunnett, is guaranteed to take you away from it all. A violent bit of historical fiction, the time and place is that moment in history when Mary, Queen of Scots, was a child and her throne the target of machinations by both the English and French. The hero would appear to be an improbable combination of the skills of Robin Hood, d'Artagnan, Lochinvar, Rhett Butler and Douglas Fairbanks, Sr. There is a plot, of course, but who cares?

The Blue of Capricorn, by Eugene Burdick, is something else again. A mixture of a personal account of the South Pacific where he fought in the war and in which he traveled for a number of years, plus fictional episodes, this is almost a must for those who dream of the soft breezes of Tahiti. In part, this tells of the natural characteristics of Oceania; also a comparative portrait of the people who inhabit the South Seas. Burdick, as you may recall, is co-author with William Lederer of *The Ugly American.*

On Wednesday the men exercised the guns. There are 12 men appointed to each gun and its opposite; eight or ten guns make a division; and each division has over it a lieutenant and two or three midshipmen. Everyone has his part prescribed, and in the exercise goes through the evolutions of a real engagement, except that no powder is used.

It is superintended at first, and the orders are given by the lieutenant, but he retires and his place is assumed at each gun by its captain; usually the most experienced in the number. They run in the gun, load, prime, point and fire it with great rapidity and each evolution is performed by order. The men are thus accustomed to the ready use of their guns and grow confident and expert.

We never indeed lose sight for a moment of the true character of our ship. Though in no expectation of an enemy, the ship is so as to be ready for action in a few minutes and, unless the weather is bad, we have every evening what is called *quarters,* presenting all the pomp and circumstance of an expected engagement. The music is ordered up just before sunset and a well known beat of the drum summons each man to his gun. Their names are called by the midshipman and each replies by rapidly stating the part assigned him.

Nearly all the officers and men have their stations on the two upper decks; a few on the berth deck to pass powder; the non-combatants such as the purser remain in their rooms; the surgeon, his mates and myself have our place in the cockpit where the wounded are to be brought.

In some of our ships, they have quarters in the morning as well as evening, and those who go most for discipline have the drum beat at unexpected moments, frequently at night. In eight minutes (on the average) every man must be dressed, have his hammock lashed and in the nettings, and be at his station, all ready for a fight.

The marines form a class distinct from all others, associating little with the rest and, from their duties, never high in favor with the tars. In port, a sergeant's guard, consisting of 13, is always kept during the day on the quarterdeck. The remainder take turns at guard in different parts of the ship; two at the gangways, one at the bow, one at the cabin door, one at the water cistern, one over the prisoners, and one at the store rooms. At sea, the lower guards are the same; the rest pull and haul on the spar deck and are, there, subject to the same orders as the sailor.

A ship like this (a frigate) is entitled to about 60 Marines and 380 sailors, and the proper selection and distribution of the latter, which belongs to the first lieutenant and is a matter of great importance, is always considered as an excellent trial of his tact.

The sailors are formed into several grades. The first is called *seamen,* and comprises those capable of doing any ship's duty aloft and on deck; they amount to about 100, and receive 12 dollars per month with a ration. The second class receives two dollars less, and includes what are denominated *ordinary seamen,* men accustomed to salt water but not so expert as the former. They are about 150 in number and to them, with the seamen, are assigned the yards, the forecastle and all the difficult and dangerous parts of the ship's duties.

A CHANGE—Messes were more informal in 1829.

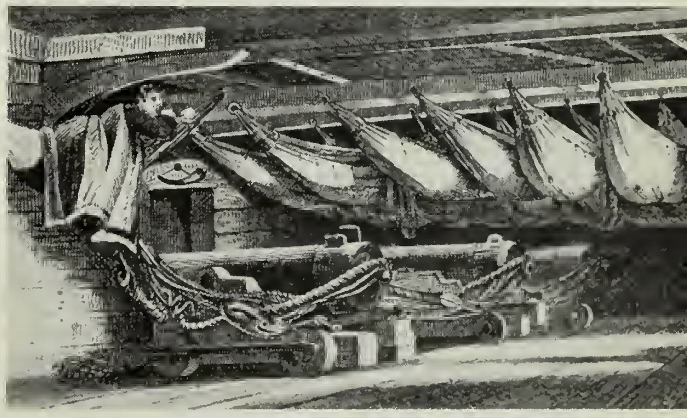
We come now to the *landsmen,* or green hands, here, amounting to about 100; and for eight dollars pay, performing the less honorable services of the after-guard and waisters. The after-guard comprise the better characters among these and have their station on the quarterdeck; the waisters settle a degree lower and occupy the gun deck. When a man is fit for nothing else, he is made a waister, and set to sweeping on the gun deck; sometimes, also, it is used as a punishment with very good effect.

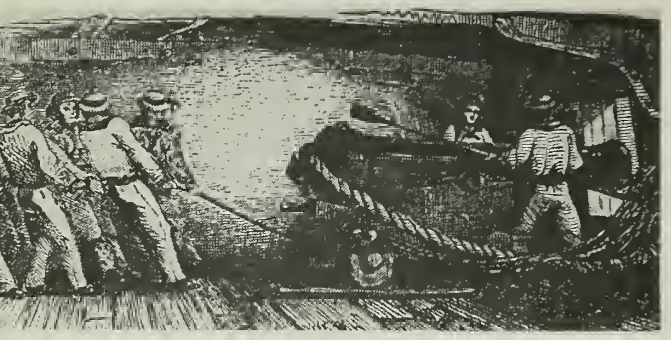
The last class is that of *boys,* not universally youths, but those who wait upon the officers and seldom do other duty except when "all hands" are called. They are often nicknamed idlers, a term of reproach frequently given to all in the ship who do not keep watch. The boys receive six dollars, with a ration, and are about 20 in number.

All the men are employed during the day. In port, a half watch is called every four hours at night, but they generally are permitted to find a corner on the gun deck for a nap and frequently they even turn into their hammocks "all standing," that is, with their clothes on. The officers alone are seen above.

At sea, however, the whole watch, comprising one half of the men must be on deck at night, and if the weather is stormy, no hammocks are piped down at all. They are divided into two watches, denominated starboard and larboard. Each is called every

HAMMOCKS were a far cry from modern bunks.





'EXERCISING the guns' kept crew members expert.

four hours and every man has his place and duty assigned him in a book called the station bill, kept in some public part of the ship. There are generally four such books — *quarter bill, station bill, tacking and veering bill, and mooring and anchoring bill.* Each man thus, in every case, knows just exactly where he should be and what is his duty and, amid apparent confusion, there is always perfect order.

In port, you are likely to see an old man, usually on the quarterdeck but often at the gangways, or you may observe him hurrying along the deck, touching his hat whenever he passes the companionway or an officer, and yet he has an air of considerable consequence. Usually, he carries a spy-glass which he has frequently at his eye and which he often drops suddenly to tip his hat and say something to the officer of the deck. His communications appear to be important, for they frequently produce a general movement on the deck. This is a *quartermaster.*

We have eight of them; they are taken from the most experienced and orderly of the seamen and receive $18 with a ration for pay. Their duty is to take turns on the quarterdeck where, in port, they keep a constant lookout on things abroad. They give notice when a boat approaches and are the medium of communication between the gangway sentries and the deck officer. They have the bell struck every hour and form an exceedingly useful set of men. At sea, they attend the wheel, keep the ship to her course, and, when she is closehauled, take station in the quarter boats, to see her kept to the wind.

A STRANGER ON BOARD is frequently struck at night with a person on the gun deck who, while all around are sunk in sleep, is seen creeping silently about among the hammocks, with a lantern in hand, apparently without an object. He is a *gunner's mate* going his rounds, which he does every hour, to examine the lashings of the guns and keep them secure.

Then comes a man who uncovers one of the pumps and lets down a line with a strip of iron attached to it. This he examines and perhaps ascends to the quarterdeck to make his report — a *carpenter's mate.* The *carpenter* has two of them, and a gang of six to eight more; the *sailmaker* has his *mates* and *aids;* the *boatswain,* four *mates;* and the *gunner,* besides his two *mates,* six more *aids,* called *quarter gunners.* These last, as well as the quartermasters, have also the most responsible stations on the lower yards.

The *master-at-arms* has charge of the prisoners, who are always given to him for confinement, and if they escape through his neglect he must suffer in their stead. He accompanies them to the gangway for punishment and must count audibly, the lashes as they are laid on. The deck lights are also under his care; he sees them extinguished at the proper hour and the galley, or stove fire, all out and reports them to the officer of the deck. Under him, as aid, is the *ship's corporal* whose duties are multiform.

When the men return from works or visits ashore, he searches them to ascertain that they bring no liquor on board; he examines the shore boats (called bombboats) when they come alongside; and watches the men in their dealings with them, both to see that the sailors are not cheated and do not purchase liquor, as well as to keep order. He also assists in the management of the prisoners.

The brig is nothing more than the space between the two forward starboard guns on the main deck. A sentry keeps guard there over the prisoners, and if their crimes are gross, they are also put in irons. Should they be very noisy a gag is employed; an instrument consisting simply of an iron bar which is passed through the mouth and fastened by a cord that goes around the head.

THIS MORNING found us lying to, a few miles from the Rock of Gibraltar. A cloud rested on its summit, forming a fine contrast to the dark solid mass below. The opening of the Mediterranean is just as it should be, and so is that of the Atlantic.

We discovered our squadron in the Bay and, running in, fired a salute to the Commodore, after which we took our station a short distance from his ship.

This is *North Carolina,* one of the finest vessels in the Navy. She is a two-decker, and is called a 74 but carries 94 and may carry 102 guns. The lower range are 42s; the next, 32s; and the upper, with the exception of two long pieces, 42-pound carronades.

I have seen a calculation which makes her, without her gangway guns, throw 304 pounds of ball more than *Lord Nelson,* the heaviest ship in the European navies. In this she is said to be equal to *Santissima Trinidad,* the largest vessel ever built, which was sunk at the battle of Trafalgar.

North Carolina looks small at a distance, but a nearer approach shows her to be a powerful vessel. The next is *Constitution,* the "old *Constitution,*" as the English say in their questions about her. She is a fine ship but does not have the dark, proud look of our own, nor does she show as many teeth. *Brandywine,* with the sloops *Erie* and *Ontario,* each of 18 guns, make up the squadron.

COMMODORE RODGERS has the command. Our motions are all guided by those of the Commodore; we cannot beat to quarters, or strike our bell or fire our evening guns till he does so and, of course, every movement of the ship will be subject to his bid. The Commodore's ship is distinguished by the broad pendant at her main sky sail mast head during the day, and a light in the mizzentop at night. The other ships carry only the single pendant.

A few days ago we commenced sending the men ashore in parties of about 50 each with permission to stay a few days and a proper sum of money to spend.

They are suffered to go ashore only three or four times a year.

Man will have amusement; his nature demands this and it is as much the duty of the moralist to lead him to what is innocent as to decry what is wrong — a factor which moralists usually overlook.

There is good society here at Gibraltar; and some speak English. Where they do not, it would be an incentive to the young men to learn the Spanish language, for Spanish is spoken by the better class and it is a language that is becoming an essential qualification in our officers. I hope it will soon become an article in the midshipman's examination; most of these officers may learn it as easily as not. I would not have it a requisite, as are navigation and seamanship, but it should be dispensed with only in peculiar cases.

French, too, should be added, not as a thing expected, but one for which credit would always be given in the examinations for promotions. Then, we should have our officers at home in foreign society. Nothing makes a man feel so insignificant as to be in company where those around him converse in three or four different dialects with fluency while he can speak only the language of his country.

The Dutch, French and Austrian officers do all this and have to do it. And it is a matter of more consequence than it seems at first sight for, besides the advantages that would arise in official intercourse, each officer is the representative of his nation abroad, often the only American seen there, and his appearance will always affect the reputation of his country.

After Brandywine *had served with the Mediterranean Fleet for a time, she received orders to return to the United States for overhaul in preparation for a Far East tour, where her presence was urgently needed. The author elected to remain in the Mediterranean and, as a consequence, was transferred to* Constitution. *A description of* Constitution's *educational system follows:*

THE SCHOOL is now underway, with very excellent regulations. We have a room screened off on the starboard side of the gun deck, just forward of the cabin.

The first lieutenant received a paper from the cabin with the names of 15 of the youngest midshipmen and directions to order them to attend school. A copy was sent to me, with orders for myself, and a form by which I am to make out a weekly report. It gives account of their studies, daily attendance, absences and reasons, and is to be closed with any general remarks I may think proper.

We had a school on *Brandywine* after leaving Havre, but its rules were not sufficiently strict and it did not amount to much.

This one promises fair; we have a blackboard and all in style. The young gentlemen enter on their studies with spirit — a few are grumbling at being treated so much like boys as to be forced to go to school. Navigation is the study.

I teach two hours in the morning. The afternoon is occupied by a Spanish instructor whom the captain has attached to the ship. Captain Patterson shows in all things a laudable regard to the improvement of his midshipmen, and they appear to be worthy of it.

THE MORE SKILLED were assigned the duties aloft.

A more gentlemanly set of young men, both as to manners and appearance, I have not yet seen in any ship in the Navy. Most of them are old in date and experience, and the greenhorns imbibe something of their character.

I find them agreeable pupils, but am amused sometimes with the recitations. One of them began to talk the other day about "A regular built straight line."

Many of the older ones are hard at work, not from choice but from necessity, for examination is not far distant and whether they will or no, study must come.

But close application of the mind goes hard with an old man-of-war's man. He gets his slate in nice order with sponge and pencil, shapes the pencil to a delicate point, draws a diagram with the most exact precision and then, at last (for he can find nothing more to prepare), he sits down to study.

But there's the rub — in five minutes his ideas are a confused mixture of sines and tangents, back-stays and haul-yards, and in five more, are in airy visions, far away.

Someone catches him by the shoulder: "Hallo there! — Rouse up, man, and study!"

He starts, gives his book a thump with his fist with an odd mixture of mortification and despair in his face, and sits down to study and sleep again.

"That talk about hypothenuse and secants," he mutters, "I just can't get the hang of it."

This was the Navy of one hundred and thirty-three years ago. It is not the nucleonic, electronic, supersonic Navy of today, but it is a Navy already rooted in tradition, and it has much the same spirit that is evident wherever you find seafaring men.

KNOTTY WORK—QMs take soundings the old way.

TAFFRAIL TALK

Before the end of this hitch, you could serve aboard a 300-ton hydrofoil research ship that can skim over the water at 75 to 85 knots.

The Bureau of Ships has awarded a cost-plus-fixed-fee contract to an aircraft corporation to build such a craft. The contract will be completed in two phases. Phase I, which will cost an estimated $1,597,718, includes design, preparation of contract plans and specifications, and the procurement of long-lead-time items. When this phase is satisfactorily completed, the contractor will construct the hydrofoil research ship in conjunction with a commercial shipbuilder. This work will cost an estimated $10,309,174, and is expected to begin in mid-1962.

A hydrofoil craft designed as a submarine chaser (designated PC-H) is already under construction. It should be completed late in 1962.

★ ★ ★

All Hands Magazine avoids the preaching approach like the plague. For one thing, we're just not in the business, and for another, we're convinced that the majority of our readers are mature Navymen who can use a minimum of it.

We're not above an occasional soft sell, however. In that vein, and with the February exams just around the corner, we observe that:

Happiness is oftentimes just a thing called advancement in rating — and a quick glance at the calendar shows that the big moment of truth is all too close at hand once again.

You know — that sinking sensation that settles over you when all the preliminaries have been disposed of, and, in the midst of a roomful of your contemporaries, you are alone with your test booklet, answer sheet, pencil, sponge and little jabber, plus a slowly dawning sense of inadequacy.

Most of you, we suspect, at that fatal instant when you flip open the front cover of the examination booklet to reveal the first page of test questions, have on more than one occasion leaped to the same conclusion we've often reached — that you've been handed the booklet for an entirely different rating by mistake. Like, it's bad enough when you don't know many answers — but when you don't even recognize the questions, you're really in trouble.

The horrible part of all of this is that, if you're not adequately prepared, it's too late at that stage of the game to do much but resort to one or more of several time-honored guessing formulas.

It won't help much, for example, to roll your eyes imploringly skyward. According to most reliable sources, He only helps those who have shown a willingness to help themselves. It won't help, either, to gaze despairingly at a proctor. He's been thoroughly motivated and equipped with the standard dead-pan expression. You'll be lucky if he pays any attention to you when you hold up two fingers.

It doesn't have to be this way — if you've hit the books. And in the weeks left to us, there's still time to do a powerful amount of studying.

In any case, to everyone here's a wish for a happy 1962 from —

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Information Bulletin is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau should be kept informed of changes in the number of copies required.

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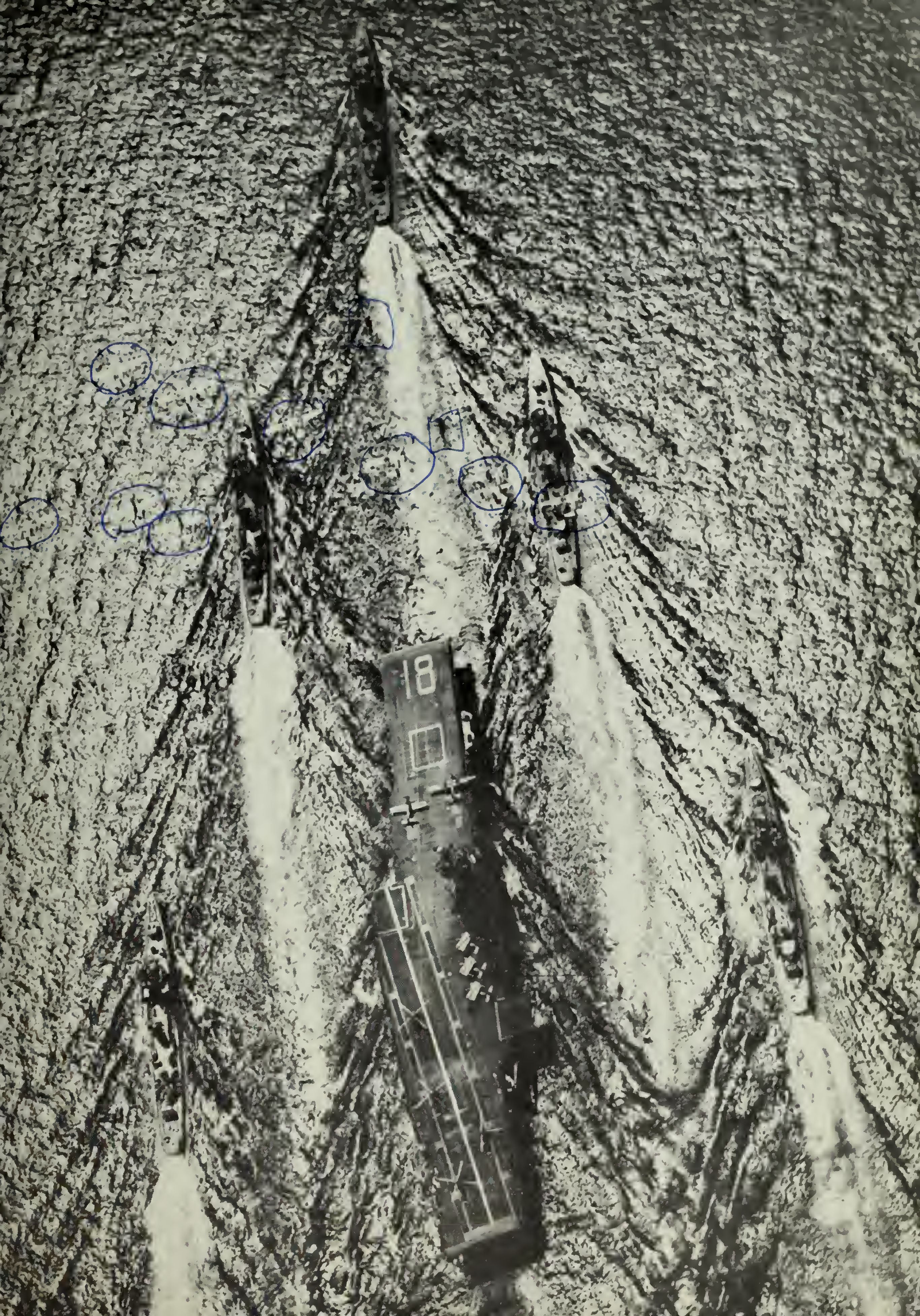
• AT RIGHT: BRAVO PHOTO — Destroyer escorts of Norfolk-based Squadron 36 lead sub-hunting Task Group Bravo, following operations in the Mediterranean, as aircraft from ASW carrier USS Wasp (CVS 18) fly above. ➡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THE DESTROYER NAVY

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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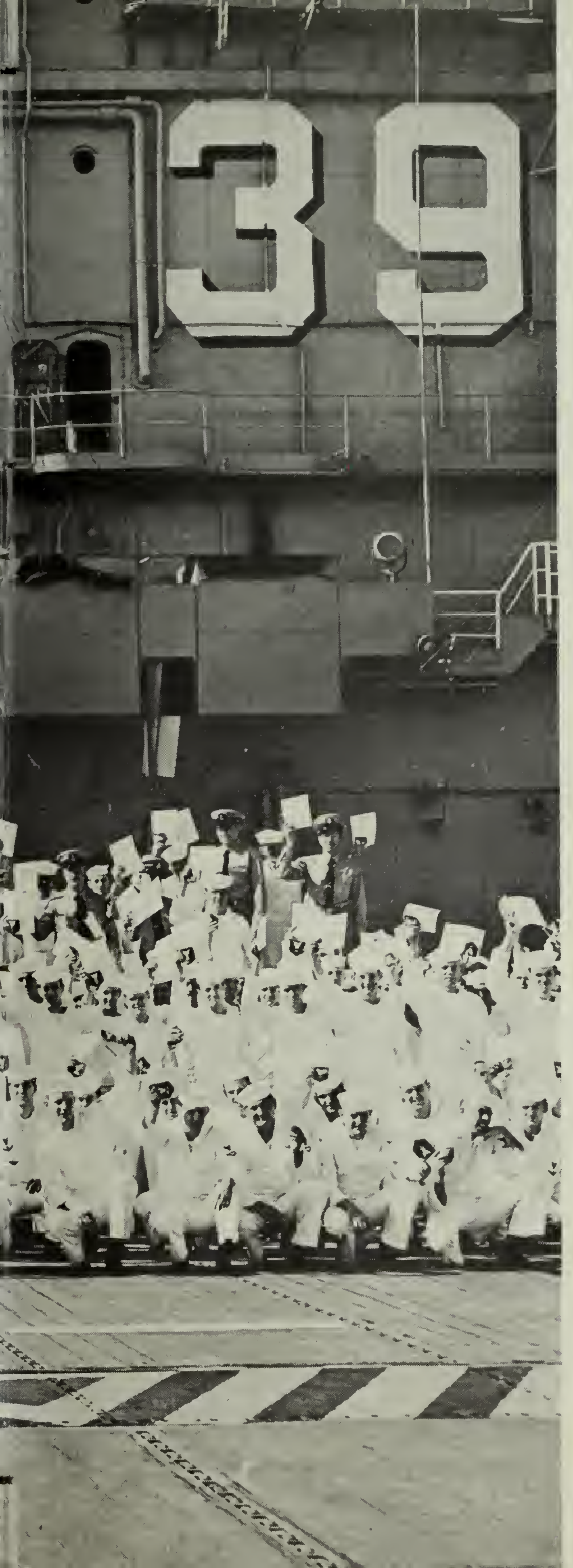

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

FEBRUARY 1962 Nav-Pers-O NUMBER 541

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, **Editor**
John A. Oudine, **Managing Editor**
Associate Editors
G. Vern Blasdell, **News**
Jerry Wolff, **Research**
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- **FRONT COVER: THAR SHE BLOWS!**—Looking almost like a large mechanical whale, as she cruises on the surface in Scottish waters, *USS Scorpion* (SSN 5B9) exchanges greetings with fellow sea traveler. Copyright photo by Keystone Press Agency, London, England.
- **AT LEFT: CROWING SITUATION**—Newly rated petty officers on board *USS Lake Champlain* (CVS 39) proudly display promotion certificates and gift rating badges presented to them during ceremonies on the carrier's flight deck.

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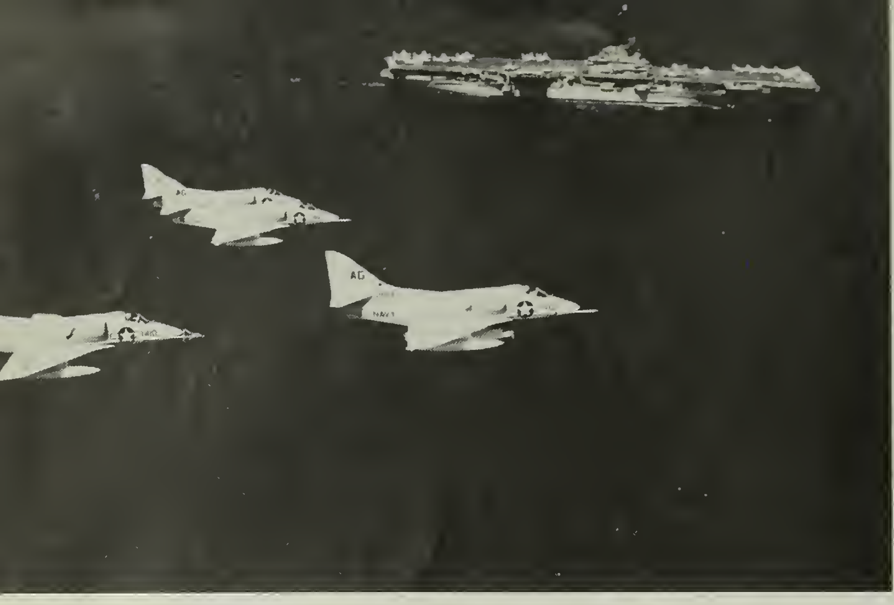


THE NAVY'S ROL

Are you curious as to what goes on in a Pentagon briefing?

If so, here's something for you. It is an actual briefing, recently given to some very high ranking people. It is slightly changed to make up for the fact that you're not sitting in the Pentagon, being briefed, with films and slides, pointers and blackboard and lukewarm coffee.

If you'd like to tell your family and friends what you are doing *and what you and your shipmates and your ships and planes* can do, *this will help. It is the thinking of the Navy's high command. It will give you some of the reasons for the deployment of your ship or plane or unit.*

Admirals and high government officials have heard these very words. ALL HANDS *thinks it is a good idea to run this—for now, everyone in the Navy will have at least this one chance to be on the inside.*

THE BASIC PURPOSE behind the deployment of the Fleet today is the *prevention of limited war.* Balanced naval forces are kept deployed at sea in waters adjacent to areas of potential conflict. The presence of these forces exerts a powerful stabilizing influence in these critical areas. Often, a presence of strength is sufficient to cool off a hot spot. But, if national interests demand, the U.S. stands ready with the requisite ground, sea and air power to defend ourselves and our allies.

This ability to retaliate rapidly from close at hand provides the U.S. with the means to implement political decisions with an immediate balanced military strength.

ALTOGETHER — Ships, planes and copters of amphibious TF work as a team to land troops on beach.

IN LIMITED WAR

The key to the effectiveness of these forces is their *mobility*. If intelligence so dictates, these Fleets can be quickly and unobtrusively moved nearer to areas of tension, while combat-ready forces in continental waters can be deployed as back-up.

The aircraft carrier, backbone of the Fleet, exemplifies the power spectrum of naval offensive power. The attack carrier, with its ability to launch nuclear retaliation from a moving base that is almost impossible to pinpoint for missile or manned aircraft attacks, adds measurably to the strength of this nation's nuclear retaliatory posture.

Only a small percentage of the ammunition stowage space in an attack carrier is allocated to nuclear bombs. The bulk of the stowage space is reserved for non-nuclear weapons stowage. As a result, the aircraft carrier is ready to respond as the situation requires.

In response to an urgent national requirement to expand and diversify the nation's nuclear forces, the U.S. Navy developed and now possesses a large potential in the field of strategic bombardment. However, this capability developed only as a by-product of the Navy's traditional role. With the exception of the *Polaris* submarines and attack bombers the Navy has no weapons systems designed primarily for nuclear retaliation.

The Carrier Air Groups and Marine Corps Air Wings are prepared for nuclear weapons delivery *and* for conventional warfare. If they can be said to be optimized for any-

ON THE BEACH — Troops storm ashore from landing craft to engage "enemy" during amphib exercises.

thing, it is for versatility. When the atomic bomb came along, the Navy and Marine Corps worked hard to incorporate its advantages into their attack capabilities. This was done while conventional capabilities were maintained at the highest level.

The Sixth and Seventh Fleets are prime examples of balanced naval forces deployed in strength in critical areas. With no strategic warning, the Sixth and Seventh Fleets are in a position to act within a few hours when our interests are threatened. It is possible to augment the deployed forces in varying degrees, dependent upon the seriousness of the threat. It is also possible to reduce the size of the force to be applied at any given point, if the nature of the threat so warrants. The versatility of these forces is only limited by the quantity of sea and air lift available.

THE SIXTH AND SEVENTH FLEETS, like the First Fleet deployed in the eastern Pacific and the Second Fleet in the Atlantic, are versatile forces. If the nature of the threat is such that troops must be put ashore, the *amphibious strength* is there to do it.

In using these forces we do not experience a "point of no return" — they can be deployed to the scene and wait for days or weeks without landing; or they can be kept out of sight and later returned to home ports without attracting public attention if the crisis is resolved.

This amphibious strength can be deployed world-wide with complete independence of action in international waters. And it can be done without committing the United States to a specific, irrevocable course of action. An amphibious force further provides a capability for sustained large scale operations, difficult, if not impossible, to achieve by any other means. It has power, mobility and versatility.

MAKING WAY — Destroyers of TF blast "enemy" with depth charges.

The speed at which modern aircraft travel leads one to say: "Let's move to the objective by air." This mode of transportation of troops is excellent for certain situations. As a means of moving a relatively small force into a lightly defended area possessing suitable airfields, it offers many advantages.

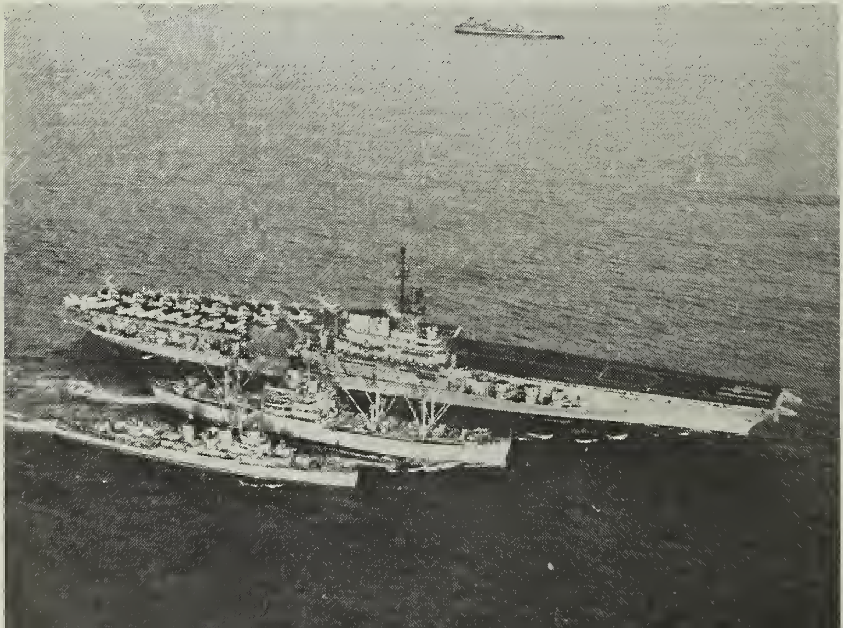
HOWEVER, there are several factors which have to be considered in connection with the use of airlift as a primary mode of travel to an objective:

- Over-flight rights. In times of political tension, or in the case of fighting in a limited area, violation of a nation's air space could lead to incalculable damage to our national interest.
- Availability of staging bases. In a limited war situation, it is possible that staging bases may not be available to us.
- Aircraft fuel requirements for return flight. Modern aircraft gulp fuel at prodigious rates. Dependent upon the the distance of the last leg of the flight, fuel must be provided for the return.
- Control of the air in conflict area. Control of the air is a must before we can send in unarmed transport aircraft. The most unsophisticated fighter, armed with only machine guns, can destroy such types. And further — in the event of encountering no air opposition — a landing may be prevented by the simple expedient of placing oil drums or other obstructions on the runways.
- Lack of sustained combat power. Finally, an airlifted assault force lacks sustained combat power. Such forces are necessarily lightly armed, and must rely on continued airlift until surface shipping can bring in the heavy tanks, artillery, helicopters, observation planes and other bulk supplies.

In order to have an effective limited war capability to counter aggressions, we must be able to apply *quickly* military forces tailored to the size of the threat, practically any place in the world. That's where the amphibious task force plays a vital role.

THE AMPHIBIOUS TASK FORCE is a balanced fighting force, ideally suited for limited warfare. The ships, airplanes, weapons (and their tactical employment) in an amphibious force were designed to give the force

ON THE GO — Resupplying while at sea keeps Fleet ready for action.



TEAM WORK — Many types of ships in Fleet have role in limited war.

the ability to fight its way to the objective area, land there, and stay there.

- Because it is mobile, it can move its complete limited war package thousands of miles in a matter of days.
- Because it is versatile—its power varies from megaton nuclear weapons at one extreme, down to small landing parties with rifles. When needed, a force such as the Sixth Fleet can go to a trouble area to fight or to evacuate U.S. citizens or friendly allies.
- And — it is flexible. It is deliberately organized and equipped so that it can take whatever action the situation demands.

The economy of an amphibious task force is another very important point. And this is not just economy in dollars. It also gives operational economy — an economy of force. In other words, the amphibious task force is a highly mobile limited war complex. The amphibious task force base can be "built" in a new trouble spot in the length of time it takes to sail there — and it is not necessary to abandon the old base in order to do this. Amphibious forces enable us to apply *maximum* influence whenever and wherever it is needed.

It is essential that air superiority be maintained over the task force, over the landing force, over the beaches and far inland at the source of the threat. This offensive capability is provided by a variety of weapons systems.

Air Superiority Over Ships, Over Beach, and Inland

To provide air superiority it has been necessary to make dynamic advances in order to cope with the capabilities now possessed by possible aggressors. In World War II, enemy capabilities mainly consisted of large numbers of relatively slow propeller-driven aircraft and air search radars were adequate to provide detection for timely intercept of raids.

The Fleet's fighter-bombers in sufficient numbers were capable of killing the best the enemy had. Night fighters were required in lesser numbers. Air intercept radar had a maximum detection range of four miles with a maximum blind firing capability of 500 yards. This was entirely adequate, considering the armament of the night fighter, .50 caliber guns—and, that at best, the enemy aircraft could reach a speed of 400 mph.

With the advent of jet aircraft and nuclear weapons the situation changed rapidly. Time was compressed radically and the necessity for a higher probability of detection, intercept and kill became apparent. Surface, air search and air intercept radars had to be improved. Fighter performance and weapons systems had to be vastly improved, and it was necessary to develop the equipment and techniques to operate in a heavy electronic countermeasure environment. In addition, it was necessary to develop automatic, high speed electronic equipment for command and control to replace the old, grease-pencil techniques.

THE MODERN TASK FORCE is ready to defend against enemy air attacks with high performance aircraft from the attack carriers, such as F4D, F3H, F8U, F4H, W2F, WF2.

A key role in maintaining air superiority is now played by the WF2 *Tracer*. While the *Tracer* is a big improvement over past early warning aircraft, the Navy is looking forward to Fleet introduction of the W2F-1 *Hawkeye.*

The kill capability is provided by such fighter-bomber aircraft as the F4D *Skyray*, F3H *Demon*, and F8U *Crusader* as well as the F4H *Phantom II*. These aircraft are not limited to air-to-air roles, but can be used to augment attack capabilities.

The three attack planes in Navy air groups today are the AD *Skyraider*, the A4D *Skyhawk* and the A3D *Skywarrior.* All can fly from carrier to target and back again in darkness and bad weather.

The AD *Skyraider* first saw Fleet service in 1946, and has been the workhorse of the flying Fleet for many years. Single-engine, propeller-driven, it can carry up to 8000 pounds of bombs and rockets — a larger bomb load than was carried by the B-17 of WW II. It also has four 20-mm cannons. Its usefulness

CARRIER-based planes, like A3D, have swift and powerful punch.

HEADQUARTERS and nerve center for amphibious attack is the AGC.

has been extended through the years by extensive modification, but its survival against serious opposition and today's detection methods is doubtful. It is being phased out of service as rapidly as possible.

The A4D *Skyhawk* is a single-seat, single-engine jet, and was the first to reverse the trend toward bigger, heavier aircraft. The present Fleet inventory consists of A4D-2 and -2N models — the latter having a radar search and navigation capability, plus a terrain clearance radar, which enables it to operate more effectively in conditions of reduced visibility.

The A4D has two 20-mm cannons and three external racks which can be used to carry various combinations of bombs and rockets. This relatively light-weight aircraft was achieved by refinements in design aimed at keeping it small and uncomplicated. How well this was accomplished is demonstrated by the fact that, ready for take-off at 22,500 pounds, more than half this weight is in bombs and fuel.

The A4D is capable of speeds above 500 knots and has proved itself a reliable, easy-to-maintain carrier aircraft. Its high performance gives it an excellent factor of survivability.

The A3D *Skywarrior* is a large aircraft — grossing about 80,000 pounds. It can carry up to 8000 pounds of bombs, all in an internal bomb bay. It is equipped with a bombing system which permits either visual or radar bomb drops, has a combat radius in excess of a thousand miles and is capable of speeds over 500 knots. The significant conventional bombing capability is extremely useful in bombing operations against fixed targets, interdiction of roads, railheads and bridges, in mining operations or in pre-landing bombardment.

These are the types of attack aircraft currently in use aboard attack carriers and in the Marine air wings. As indicated, all can carry various combinations of bombs, including 2000, 1000, 500 and 250 pound general purpose bombs, fire bombs, and fragmentation bombs, as well as multiple rocket packs. All of these aircraft are also capable of carrying nuclear weapons.

NEW DEVELOPMENTS which will improve Navy aircraft for the attack role are in the works.

An improved A4D will enter the Fleet next year. The A4D-5 has a new, lighter engine, with more thrust and better specifics, and two additional bomb racks. This modification of an already proved design will increase aircraft range, bomb load and loiter time over a given target area, without materially increasing aircraft cost or pilot training problems.

Also entering the Fleet next year is the A2F *Intruder*. The *Intruder* is designed to fill the need for an aircraft that is optimized for the close air support mission, and which can perform in any kind of weather. The aircraft is big, grossing about 52,000 pounds, but can carry a large bomb load and is capable of operating from small fields. It includes a digital computer and a new contact analogue instrument system that will permit long-range missions at very low altitudes and precise delivery of its weapons in conditions of zero visibility.

THE AMPHIBIOUS ASSAULT is the most complicated of military operations. It involves all types of warfare. The first problem, of course, is moving the landing force to the objective area. The answer to that problem is an adequate sealift capability.

Amphibious ships are an integral part of our deployed Fleets in the Pacific and the Atlantic and Mediterranean. These include ships like the frigate, destroyer, missile cruiser and the hunter/killer ASW forces,

IN THE ACT — ASW teams play a part by preventing attack by subs.

FROM ABOVE — Copters load up to land troops behind the lines.

the LPH helicopter loaded amphibious assault ship and a ready force of APA and LSD transports and assault landing ships.

In addition to the firepower provided by aircraft, surface gunfire and rocket fire can contribute to the effort to prepare the assault area for landings.

Also, other pre-landing support operations take place — minesweeping, underwater demolition work — these, and many other operations are coordinated to ensure the success of the landing.

The critical phase in an amphibious operation is the ship to shore movement. Under a firepower umbrella, the assault troops are moved ashore — in landing craft or by helicopter in the vertical envelopment operation.

After the initial assault, landing ships are used to disembark tanks, heavy artillery and reinforcements.

THE MARINE LANDING FORCE must provide specially trained troops — properly equipped, and backed up with integral air support. This is the job done by the Fleet Marine Forces, the FMF. Since its inception, many years ago, the continuing aim of the FMF has been to develop, refine, and re-refine techniques of the small war job, or "limited war" job as it has come to be called. Over the years the Marine air-ground team has been evolved, tested and proved in many battles. It is a *known* quantity and one which has reached a very high state of efficiency.

The basic fighting organizations of this air-ground package are the Marine division and the Marine air wing. Each individual unit and item of equipment in the division and wing is tailored to all the others. By having this close interrelationship the Marines are able to exploit the potential of the individual components. And when this team of tanks, artillery pieces and missiles are delivered and landed, and supported by the amphibious task force and attack carrier strike force the U.S. has a limited war capability that no other country in the world can match.

Once the force is ashore, close air support is required. This is provided by an effective air control system. In a Navy/Marine amphibious operation, aircraft are closely interwoven with other tactics and techniques — and the performance and characteristics have been designed to fit them into the total limited war scheme.

The basis of the Navy/Marine air control system is that the ground commander, once established ashore, must have aircraft under his immediate control, and immediately available to him.

Everything the airplanes do must be pointed toward support of the mission. To do this right, the air effort must be mated with the total effort. This is the job done by the air control system.

Close air support probably is the hardest of the attack jobs to do well, and takes the highest degree of specialized effort. This is the place where air firepower must be very closely integrated with the scheme of maneuver on the ground.

Close Air Support

The battalion commander is the ultimate user of the close air support product. For that reason, the aim of the air control system is to facilitate placing airplanes under his direct control for "on call" strikes when he needs them.

To do this, each battalion has with it a tactical air control party, which includes experienced Marine aviators with the communication equipment to talk directly with the airplanes that drop the bombs. When air support is needed, the forward air controller is in a position to see the target, talk the planes in on their attacks, and observe the results

PUNCH — Guns and missiles would pound shore before landings.

of their action after the attack.

An early objective of the landing is to establish Marine aviation ashore.

Great strides have been made in improving capabilities for operating high performance aircraft in forward areas. The development of the Marine SATS (short airfield for tactical support) will permit high performance jet operation from two or three thousand foot runways instead of the usual seven or eight thousand. By utilizing portable aluminum matting, mobile catapault and arresting gear, portable fuel farm, control tower, CCA, Tacan, etc., this system will provide the Marines with an operational airfield within three days after a suitable site is taken.

By amphibious assault the U. S. can counter an aggressor — and sustain its power on a hostile shore. By amphibious action the U. S. can establish a base of operations from which the tremendous amounts of material required to wage modern war can be landed, to insure a quick victory in limited war (and can protect the independence of an area against aggression).

Why do you constantly have to learn about new gear and equipment? Why must you learn new maintenance techniques? Here's what the briefing had to say on that:

"The Navy cannot maintain its capability to fulfill its missions in all-out nuclear exchange, or the various gradations of limited war, with obsolete and worn out equipment. To maintain air effectiveness an orderly and continuous improvement and replacement program is an absolute necessity. The Navy and Marine Corps team has a tradition of preparedness for all levels of the threat and this ever-ready team has the will to preserve this worthy tradition with the necessary tools."

There's your Pentagon briefing. It doesn't, of course, cover all the billets in the Navy—but it does give all Navymen a larger view of what is what. It doesn't mention a lot of the equipment (hardware, they call it in the Pentagon) with which you have to work. But it does tell you, in large measure, what that equipment is standing ready to do, with you to handle it.

Next time you're on patrol or out on maneuvers, give it a thought — you'll see what you and your ship or plane fit into on the big scene.

TOGETHER — Philippine minesweepers operate with Seventh Fleet.

Joint Mine Force Exercise Is a Clean Sweep

Minesweeping units of the U. S. Seventh Fleet and the Philippine Navy should be even more proficient now. They have recently completed a week-long joint minesweeping exercise in the vicinity of Corregidor Island, Philippines.

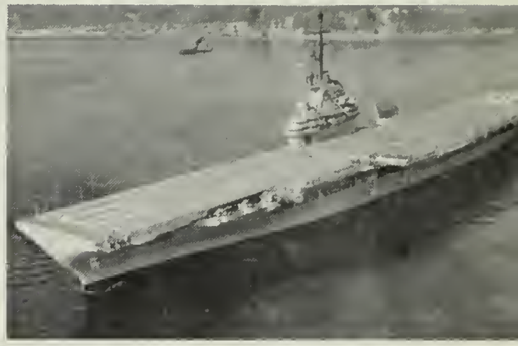
Ships participating in the joint exercise included the Seventh Fleet minesweepers USS *Conquest* (MSO 488), *Esteem* (MSO 438), *Gallant* (MSO 489), *Illusive* (MSO 448) and the Philippine ships RPS *Zamboanga* (M 56) and *Zambales* (M 55). Aircraft of Seventh Fleet Patrol Squadron 40, also took part in the exercise.

To achieve even further coordination, Philippine officers observed the exercise from the Seventh Fleet minesweepers, and other Philippine sailors participated in the mine-planting phases.

In addition to sharpening the effectiveness of the two participating countries' mine forces, the exercise evaluated the performance of the Seventh Fleet ships.

JOINT OPERATION — Philippine minemen work on sweeping gear on board *RPS Zamboanga* during exercises with U. S. Seventh Fleet.

The Landing Party



THE LANDING PARTY of USS *Yorktown* (CVS 10) has completed six days of intensive combat training on the beaches of Subic Bay, Philippines.

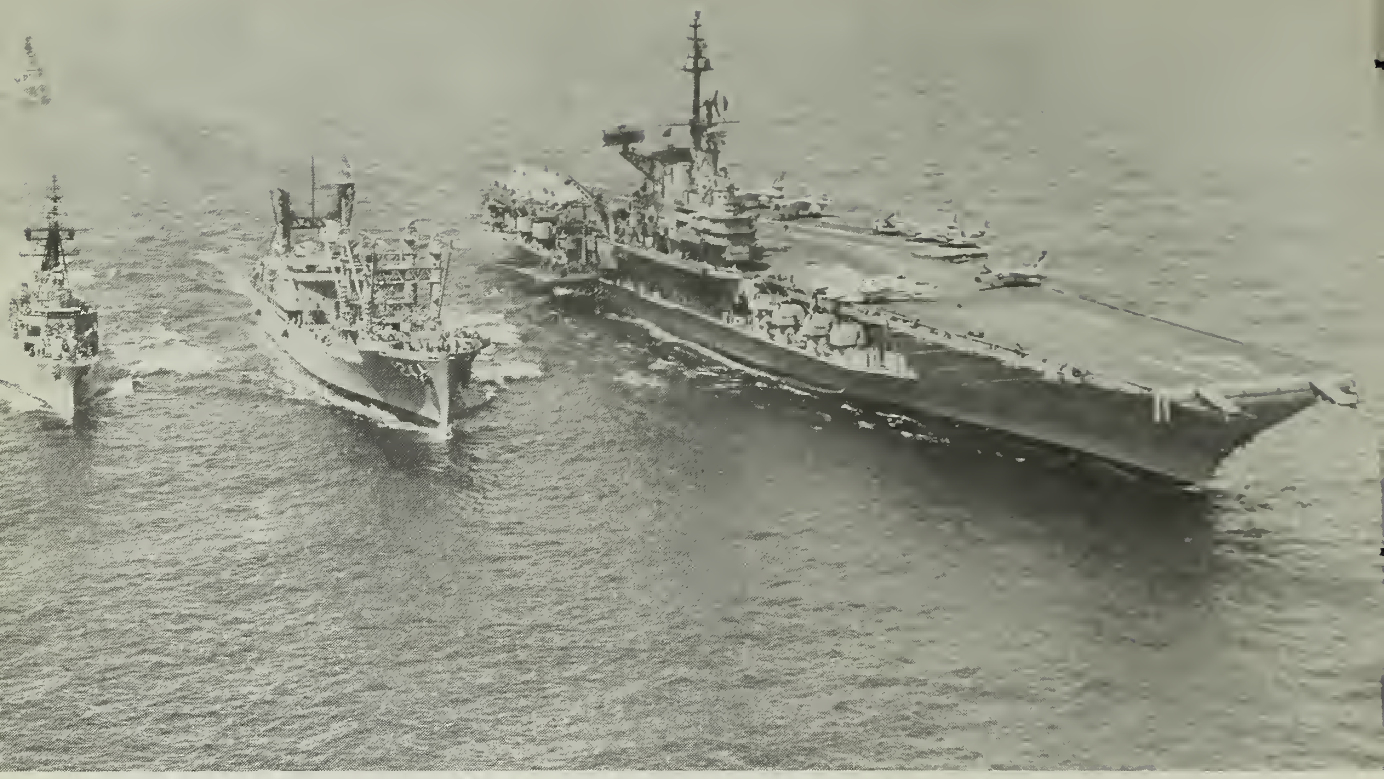
This training, called Operation Philippines, was participated in by all the members of the aircraft carrier's landing party, which is composed of six officers and 195 enlisted men

Serving as instructors, Navy corpsmen and Marines taught such subjects as first aid and field sanitation, arm and hand signals, fire team tactics, rifle platoon tactics, employment of machineguns and flame throwers, combat patrols, night fighting and rifle company tactics.

After "classroom" instruction was completed, practical training was held in the field. Live ammunition was used for the sake of realism.

With Operation Philippines completed, *Yorktown*, a unit of the U.S. Seventh Fleet, continued her Far East cruise.

Clockwise from top photo: (1) Members of *Yorktown's* landing party charge from a Mike boat to establish a foothold on a rock-covered beach of Subic Bay. (2) An aerial photo shows the aircraft carrier *Yorktown* steaming in calm seas near the coast (3) A Marine lance corporal operates a portable flame thrower. (4) Three *Yorktown* sailors watch closely as a white phosphorous grenade explodes in front of them. (5) Employment and proper handling of the .30-caliber light machinegun is demonstrated by two Marines from ASW support carrier *Yorktown*.



ON THE JOB — *USS Morton* (DD 948) and *USS Midway* (CVA 41) move alongside *USS Pyro* (AE 24).

Ammunition Ship

A NEW BREED of ships has joined the U.S. Pacific Fleet. Although they are little known, and almost as seldom seen as the *Flying Dutchman* of yesterday's sea lore, they have bolstered the war deterrent role of the Fleet.

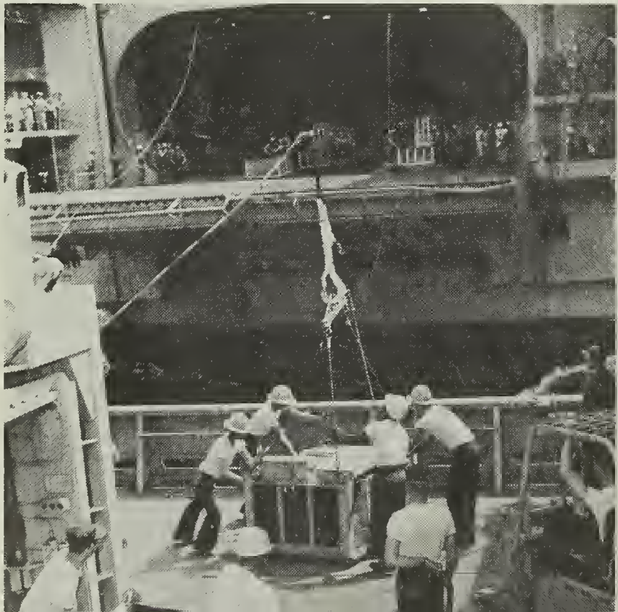
Most of the mystery surrounding these ships is a natural byproduct of their mission: Handling and delivering naval ammunition and explosives. They are among the first ships specifically designed and built to deliver that type of cargo to naval striking forces under any sea conditions.

They are the ammunition ships USS *Pyro* (AE 24), *Mauna Kea* (AE 22) and *Haleakala* (AE 25).

Typical of these ships is *Pyro*. *Pyro* cost $17 million, was commissioned on 24 Jul 1959 and joined the Pacific Fleet in early 1960.

Even her name is appropriate — Pyro is a Greek word which means fire. The first U.S. Navy ship by this name was AE 1, which was commissioned in 1939 and stricken from the Navy list in 1946. In her day an AE's job was to haul ammunition up and down the U.S. coast between ammunition depots. She did make an occasional delivery to war-

SEA SHELLS — Ammunition is passed to carrier and *(rt.)* 5-inch shells head for DD while underway at sea.



FAR OUT — *Pyro* sailors board launch for long trip to shore. *Rt:* Marlinspike seamanship is passed on.

ships, but only when they were in port. Modern AE's are always busy.

TODAY'S *Pyro* is an ultra-modern, special cargo ship about the size and weight of a cruiser, and almost the only features she shares with her predecessor are the name and cargo designation. AE 24 is equipped to load, stow and transfer at sea the latest types of naval ammunition, missiles and explosives. *Pyro's* customers are aircraft carriers, cruisers, destroyers, guided missile frigates and any other type of warship which needs her products.

Her modern cargo-handling equipment includes such items as battery-powered fork lift trucks; double, electric cargo elevators; automatic hatch covers; and the most diverse and complete block-and-tackle array, cargo booms and allied superstructure rigging that has ever been installed on any U. S. Navy ship.

Constant-tensioning devices in her six huge king posts enable her to transfer single loads of tremendous weight and also to increase the speed and safety with which loads can be transferred. *Pyro* claims she can transfer ammunition to any type of present-day ship faster than the ship is able to receive it.

Pyro and her sister ships provide a power-packed ammunition belt for ships of the U. S. Pacific Fleet.

IF THE AVERAGE Navyman were asked to name the characteristics that he would like to find aboard his next ship, his list would probably include the following—among others:

A comfortable bunk; air-conditioning; a pleasant messing compartment; a well-equipped crew's lounge; and lots of deck space.

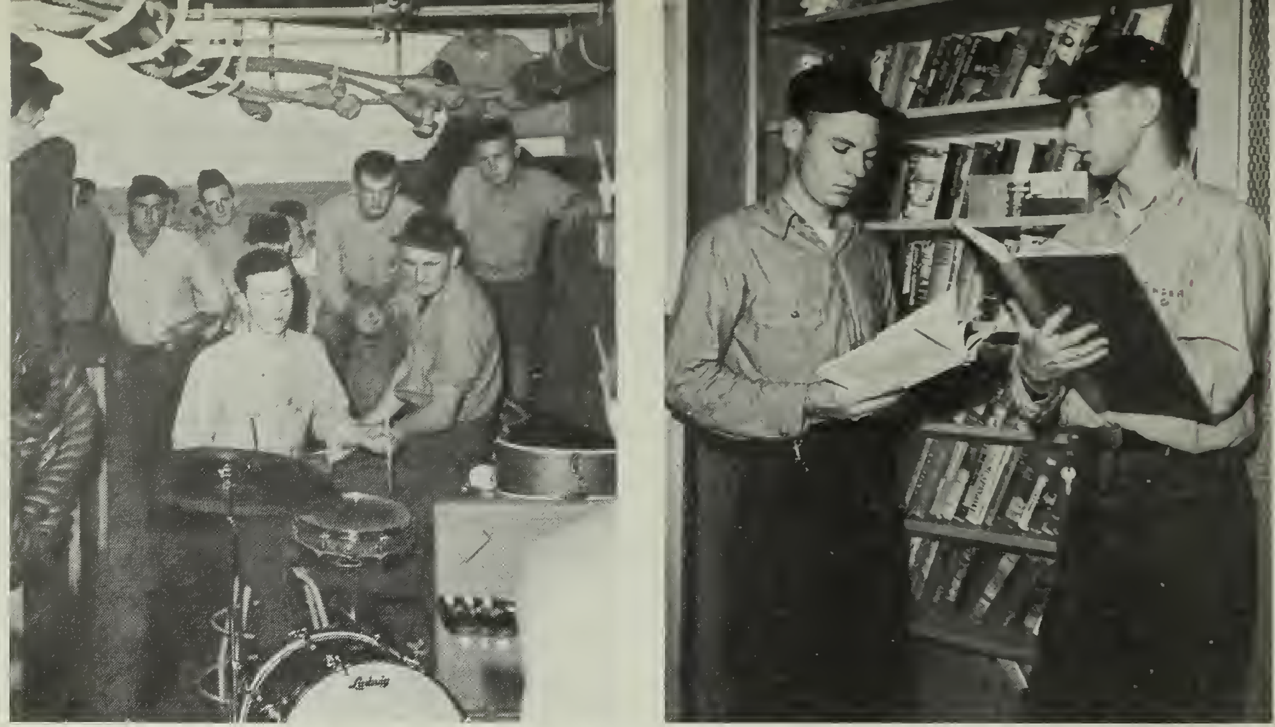
If that man's next transfer orders were to assign him to one of the Pacific Service Force's new AEs, he would soon discover that his new ship had all this — plus a very important bonus.

In the ammo ship *Pyro*, for instance, each of the crew's bunks has a built-in locker, swivelled ventilation outlet, fluorescent reading light and foam-rubber mattress.

All living and working spaces, including the cargo holds, are air-conditioned.

The crew's messing compartment is equipped with four-man tables

ANCHORS AWEIGH — Deck gang ups anchor as *Pyro* sets out to sea.



FUN TIME — Crew members relax with jam session on deck and *(rt.)* enjoy ship's well-stocked library.

that have upholstered swivel-type seats. The compartment is decorated with huge color photographs of landscapes, two giant wall-maps — one of the United States and one of the world — and curtained portholes.

The ship has two large crew's lounges. Each is equipped with a television set, radio-juke box outlets, games and game tables, and overstuffed furniture.

Near the lounges, there is a post office, a library, a barbershop, a laundry, a soda fountain and a well-stocked ship's store.

Pyro has an over-all length of 512 feet, and a beam of 72 feet. This gives her crew lots of deck space for recreation activities.

The important bonus of duty in *Pyro* is in the size of her crew. Although she is approximately the size of a cruiser, she only has a destroyer-size crew. That small population in such a large area gives everyone plenty of elbow room — which is a rare commodity much appreciated by all Navymen.

AMMUNITION SHIPS are seldom found moored to a pier in a harbor. As a matter of fact, they are seldom found anywhere in a harbor. Their in-port habitat is normally the open sea several miles offshore.

Veteran ammunition ship sailors swear that most destroyers set their special sea details just after passing an ammo ship's anchorage.

"An ammunition ship is probably safer than any other Navy warship," one veteran crewman of *Pyro* said. "We do carry more explosives than the average warship, but on the new ammo ship, like this one, we are better equipped to handle and store them, and our crewmen are probably much more safety conscious."

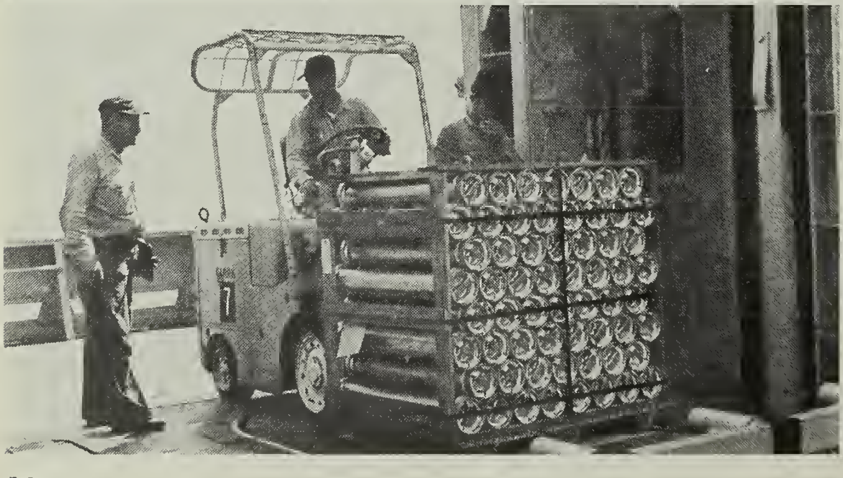
"As for our distant anchorage positioning," he added, "it's just that extra little safety measure that the Navy always adds to all of its operations."

There are eight other ammunition ships in the Pacific Ocean, equipped to transfer at sea the latest in naval ammunition, missiles and explosives.

"USS *Pyro,*" says Chief Boatswain's Mate Paul Nelson, "has every conceivable kind of modern shipboard rigging."

"We also have every type of transfer-at-sea device that any other Navy ship has — and several things not

LOAD OF AMMO is brought up by elevator to deck, where fork-lift moves it to highline transfer point.



LINE WORK — Transfer lines are secured on overhead storage hooks. *Rt:* BMs start to make a cargo net.

found on any other type of ship," he added. They keep the crew on the go.

ONE LOOK AT *Pyro's* superstructure will convince you. Framing a spiderweb of steel wires and manila lines, six huge king posts dominate the "skyline" of this floating arsenal. Four of the towering structures are located forward of the bridge superstructure, two to starboard and two to port. The other two are aft, one to starboard and one to port.

Each of these king posts is the "guts" of a device that is the special delight of Chief Nelson and the other boatswain's mates in *Pyro's* deck department. It's called a "counterweight tensioning highline trolley device," or simply the "CWT."

Three large weights are mounted, like elevators, inside each of the king posts. These weights keep the transfer line taut between *Pyro* and a receiving ship by compensating for the roll of each ship — with an up or down movement inside the king post.

One weight, two weights, or all three weights are used, depending upon the weight of the loads being transferred. If a transfer load exceeds the compensating weight of all three weights in a king post, a second king post is connected to the transfer line — giving compensation of up to six counterweights.

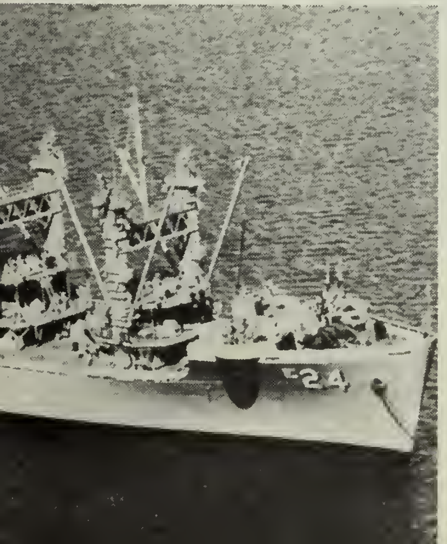
EFFICIENCY is of utmost importance in the operation of these transferring devices because of the nature of the loads that are transferred. Ammunition, explosives, and projectiles require more careful and precise handling than ordinary stores. Designed for such efficiency are these towering king posts and their counterweights. The value of these devices is demonstrated time and again with *Pyro's* customer ships — the aircraft carriers, cruisers, destroyers and guided missile frigates of the Pacific Fleet.

In keeping with the traditional Navy policy of never putting all of its eggs in one basket, *Pyro* is also fully equipped with the conventional cargo-handling and transfer-at-sea booms, winches, and rigging.

"No other ship in the Navy gives a boatswain's mate as many opportunities to fully practice his profession," declares the Chief.

And that's pretty much how all the crew members feel about duty in this modern ammo ship.

BETWEEN CHORES — *USS Pyro,* of Service Force Pacific, rests at anchor. *Rt:* Lounge is put to good use.



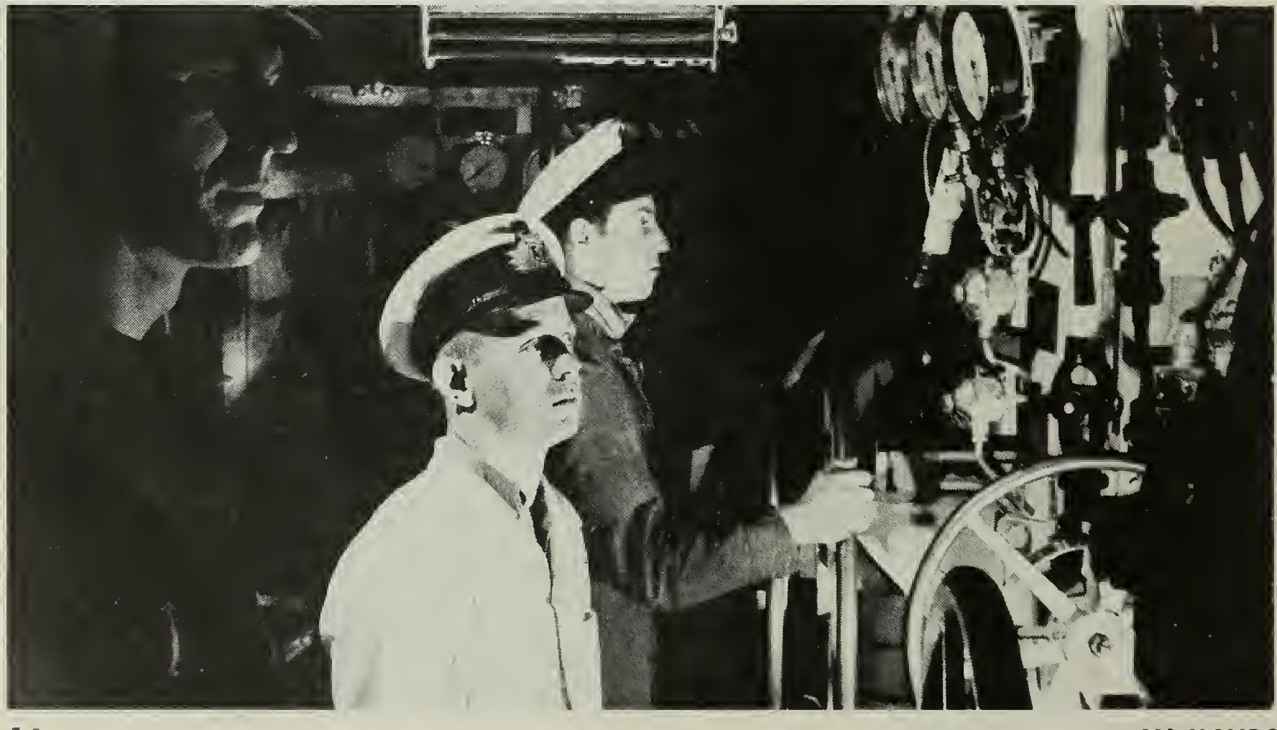
A Tou

Surrounded by the sea and known for centuries as the world's foremost sea power, Great Britain has long recognized the importance of a navy as a powerful instrument both in keeping the peace and in winning wars.

Since the year 1588, when Queen Elizabeth I's naval forces defeated the 132 ships of the Spaniards' Invincible Armada — from which battle the island nation emerged as "mistress of the seas" — this country has relied heavily on her sea service as a link with the members of the British Commonwealth of Nations and with her allies all over the world.

When Great Britain entered World War II her navy still rated as second to none. At the peak of the war her naval personnel numbered more than 700,000 men. But in six years of conflict her naval losses were terrific. In the battle to keep the sea lanes open, to feed her people, and to protect the flow of supplies necessary to the war effort, Britain's naval losses mounted to 730 ships, including five battleships, eight aircraft carriers, 26 cruisers, 128 destroyers and 77 submarines. The post-war years saw further re-

STERN VIEW — *Daring* class DD maneuvers during Med exercises. *Below:* Training session on *HMS Roebuck.*



With the Royal Navy

trenching of her fighting forces as Great Britain fought to pay her reconstruction bills and repay her debts.

Today, two decades after the Battle of Britain, what is the status of the Royal Navy? How big is it? How does it operate? What kind of ships make up Her Majesty's Fleet? These are questions of interest to the U. S. Navyman, because of our traditional ties with our British ally. Both our nations are members of the North Atlantic Treaty Organization, and both nations have been on the same side in three major conflicts of the 20th century.

Today, while very much smaller, the Royal Navy ranks high from the standpoint of the quality of her ships. The British Fleet rates third in size among the navies of the world, after the United States and Russia.

HERE IS WHAT ONE British government publication has to say concerning the importance of the Royal Navy today:

"Sea power, which is another name for naval power, is essential to this country. Without it, our world-wide trade, which is dependent almost entirely on merchant shipping, could not be maintained in time of war; our army could not be transported overseas to fight; nor would our shores be safe from invasion. As a national newspaper said in a leading article — 'Britain may be an unsinkable aircraft carrier, but without sea power she would be sunk.'"

A report to Parliament by the First Lord of the Admiralty, in February 1961, included the following summation: "In a continually changing political and strategic situation the special values of sea power — its mobility and flexibility — remain constant. Indeed these qualities have stood out more clearly as the number of British bases overseas has declined. Sea power can be quickly concentrated and brought to bear where it is needed . . . poised in readiness at sea without encroaching upon a country's sovereignty . . .

"As weapons become more and more destructive, it is more important than ever that local outbreaks of violence should not be allowed to develop into full-scale war, with the attendant risks of nuclear conflict. Military power must be deployed quickly and effectively when trouble occurs, and this is a primary task of the Royal Navy."

ONE FACT WILL probably strike you with your first look at Great Britain's navy today. While the Royal Navy itself is very old, the British Fleet is very new. A large number of its ships have been commissioned since 1950, and there are very few ships in the Royal Navy that were built earlier than World War II.

Britain's modern navy has a total of 255 ships, of which 144 ships make up the operational fleet, with 41 additional ships engaged in trials and training, and 70 others serving as support ships and auxiliaries.

In addition, Great Britain has 323 ships in reserve, or undergoing long refit, modernization and conversion.

A further point Great Britain's navy-minded people will make in discussing the size of her Navy, is that the strength of the Commonwealth navies has greatly increased. Since World War II, 110 Royal Navy ships have been transferred to Commonwealth navies. Among these were five flattops, eight cruisers and 32 destroyers and frigates. At the same time, British navy yards have been and are playing a big role in the expansion programs of the Commonwealth navies.

During 1960-61, British shipyards completed five frigates and an aircraft carrier for members of the Commonwealth. Under construction are three frigates for South Africa; and hundreds of Commonwealth officers and enlisted men attend training courses at Royal Navy schools each year.

THE ROYAL NAVY is broadly divided into two geographical groups:

- The *Eastern Fleet*, based at Singapore.
- The *Home Fleet* and the *Mediterranean Fleet*, collectively categorized as the "ships west of Suez," which are virtually interchangeable.

In addition there are fleet units at various locations, including the Far East, the Persian Gulf, the South Atlantic and the West Indies.

The Royal Navy today is designed to function along the lines of the

IN LINE—British aircraft carriers *HMS Victorious, Ark Royal* and *Hermes* make a pretty picture cruising in formation during operations at sea.

ROYAL NAVY all-weather fighter *Sea Vixen* banks around island. *Rt:* AEW *Gannet* returns from patrol.

"balanced fleet" concept—with modern carriers as her capital ships; ASW ships, including frigates with helicopters and hunter-killer submarines; fast new cruisers that are self-supporting, maintaining themselves for longer periods than ever before; plus Britain's small but versatile escorts.

Here is how the British Fleet looks today:

- ***Aircraft Carriers*** — Britain has four: HMS *Ark Royal, Hermes, Victorious* and *Centaur.* They are designated as the modern capital ship. Three are normally operational throughout the year, while the fourth is refitting. In addition is HMS *Eagle,* a sister ship of *Ark Royal,* which is undergoing extensive modernization.
- ***Commando Carriers***—These are assault ships, carrying Army men or Marine commandos. HMS *Bulwark,* with one commando embarked (the Marines are divided into five groups, each known as a commando), is serving east of Suez. Another ship, HMS *Albion,* is being converted to a commando carrier. Each will have the capability of transporting two commandos under wartime conditions.
- ***Cruisers***—In commission are five cruisers (three of them brand new): HMS *Belfast, Bermuda, Tiger, Lion* and *Blake.* They serve the Royal Navy on the Home Station, in the Mediterranean and on the Far East Station.
- ***Destroyers*** and ***Frigates*** — They are known collectively as "escorts" in the Royal Navy. A total of 53 escorts (20 destroyers and 33 frigates) are deployed throughout the world. In 1960 the Royal Navy added five new frigates to its fleets. In addition there are two destroyers and 17 frigates engaged in "trials and training."

Now under construction are four guided missile destroyers with surface-to-air missiles — to serve as escorts to carriers. During the past year the British government invited contract bids for two more guided missile DDs. They will have up-to-date missile systems, detecting devices and antisubmarine weapons. The first of this class, HMS *Devonshire,* is scheduled for completion in early 1962.

- ***Submarines*** — With the operational Fleet are 30 submarines, while on trials and training are two more subs. The Royal Navy's Home Submarine Flotilla consists of three submarine squadrons. In addition divisions are operating from Malta, Singapore, Sydney and Halifax.

Great Britain's first nuclear submarine — now nearing completion — will be called HMS *Dreadnought.* A hunter-killer submarine, it will be equipped with highly sensitive detection gear and homing torpedoes. A second nuclear submarine has been ordered by the government, and most of its machinery will be of British make. It will be named HMS *Valiant.*

- ***Minesweepers*** — The operational minesweeping fleet is made up of 26 coastal and 12 inshore minesweepers. On trials and training are 12 more. These ships are based in the United Kingdom, Malta and Singapore. A number of inshore minesweepers are operating at Hong Kong.
- ***Amphibious Ships***—The nucleus

ROYAL VISIT—Her Majesty Queen Elizabeth pays a visit to HMS *Eagle.*

STRIKING PAIR — *Buccaneer* and *(rt.) Scimitar* are fast jet strike aircraft of the British Fleet's air arm.

of this group is seven landing vessels, including a "landing ship headquarters." The Amphibious Warfare Squadron will be modernized with the addition of an assault ship of a new design. Similar to the U. S. Navy's LSD, she will launch her landing craft by ballasting to lower herself in the water until the well deck is flooded. She will serve as headquarters ship in the assault area, will sport a helicopter platform, and will be superior in range and speed to the currently operating LSTs in the squadron.

There are no battleships in today's Royal Navy. The last battleship, HMS *Vanguard,* was sent to the breaker's yard in August 1960. A sizeable number of ships in the Royal Navy today are less than 10 years old. Perhaps the two oldest ships are HMS *Protector,* completed in 1936, which serves as an ice patrol ship, and a converted commercial liner which is used as a heavy repair ship.

THE FLEET AIR ARM — The story of naval flying in Great Britain dates back to the year 1908, when the Admiralty ordered its first airship for reconnaissance purposes. The first naval officers were taught to fly heavier-than-air machines in 1911, and by 1914, the first year of World War I, the Royal Naval Air Service had been born. At the end of that conflict, the RNAS numbered 55,000 officers and men, plus more than 3,000 aircraft (primarily fighters and torpedo - reconnaissance seaplanes) and 50 airships.

A Royal Naval Air pilot made the first deck landing in 1917, and before the end of the war, HMS *Furious,* a converted battle - cruiser, operated against the enemy as a carrier equipped with land-type aircraft.

In World War II the Fleet Air Arm (as it was now named) operated in the Atlantic and in the Pacific, in the Arctic and the tropics. There were 50 carriers, ranging from large flattops to converted merchant ship hulls with flight decks added. The naval air force numbered 64,000 officers and men by the war's end. There were 62 air stations in commission and over 3,000 aircraft in the Fleet Air Arm when the enemy surrendered.

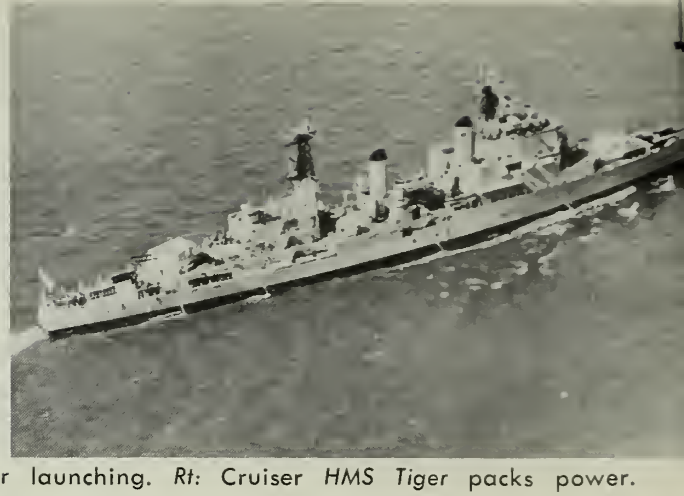
In the years since then, the Royal Navy has pioneered in many advances in naval aviation. For example, Great Britain is credited with three important "firsts" that are vital to carrier flight today. They are the *angled flight deck,* the *steam catapult* and the *mirror landing system.*

All operational carriers of the Royal Navy are equipped with the angled deck, and the steam catapult has been fitted in most operational carriers. The "batsman," Britain's name for the landing signal officer, is replaced by the deck landing mirror aid. The U. S. Navy was quick to put all three contributions to use in our own aircraft carriers.

TODAY'S FLEET AIR ARM aircraft have nuclear capability. Among the aircraft are:

- *Scimitar,* a strike aircraft.
- *Sea Vixen,* an all-weather, day-and-night fighter.
- *Buccaneer* — now coming into service — a high - speed, low - level strike aircraft, with lots of power.

ROYAL ESCORT — British frigate *HMS Torquay* makes hard right turn.


NUCLEAR-powered *HMS Dreadnought* is moved after launching. *Rt:* Cruiser *HMS Tiger* packs power.

- *Gannet,* an airborne early warning aircraft.
- *Whirlwind,* an antisubmarine warfare helicopter, for service in the commando carriers.
- *Wessex,* a commando helicopter. The first front-line *Wessex* squadron was embarked in HMS *Ark Royal* in the latter part of 1961. An all-weather, antisubmarine copter — it is a British version of one of ours — the *Wessex* has striking as well as hunting capacity, and carries homing torpedoes and "dipping asdic" (which is what the British call their form of sonar).
- *Westland P.531* — a light torpedo-carrying helicopter, which will be used on frigates for antisubmarine warfare. It is expected to increase greatly the speed and range of attack by the frigates in ASW.

Among the new weapons in the Royal Navy is a lightweight antisubmarine torpedo, British version of the U. S. Navy's air-to-sea torpedo. Production of this torpedo for use by Royal Navy helicopters was under way last year.

In the field of guided missiles, the Royal Navy has the *Seaslug,* a surface-to-air missile designated for guided missile destroyers, and the *Seacat* — a short-range antiaircraft missile replacing the Bofors gun in frigates and destroyers. The *Seaslug* is a medium-range weapons system. The Mark II version of this missile, not yet in use, is faster and has greater range. It is scheduled for installation in the two newest guided missile destroyers.

ROYAL MARINES — Today's Royal Marine Force is nearing completion of its third century of service as a component of the British Navy. It is probably the oldest Marine force in the world on continuous active duty, and it has a history dating back to 1664.

In the early days of the Royal Navy it had been usual to embark soldiers to help defend the ships and to land and fight on shore if necessary. For a long time the soldiers who were embarked were drawn from any regiment of the line that happened to be available, but in 1664 King Charles II ordained that a special regiment should be "prepared for sea service." This regiment was called the "Duke of York and Albany's Maritime Regiment of Foot," and it is from this regiment that the Corps of Royal Marines is directly descended.

Today the Royal Marines number 8,500 men and include five commandos. The RM commando units are highly trained and powerful, "at immediate readiness to move anywhere."

BIG PUNCH — *Seaslug* is launched.

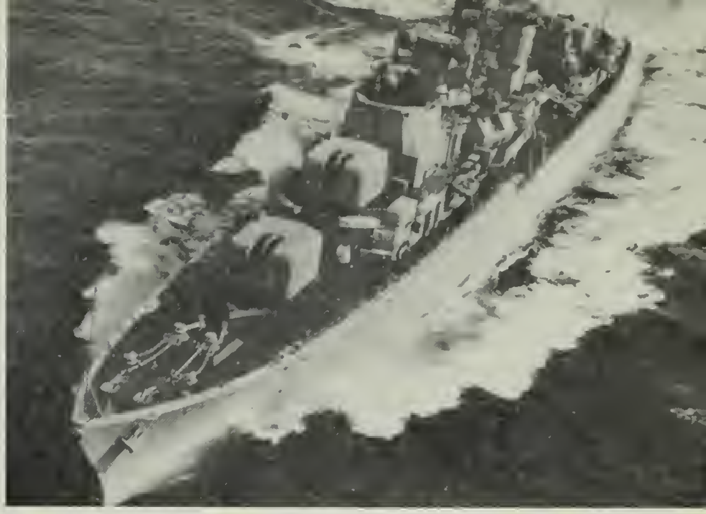
Commando service is one of three main tasks of the Royal Marines. The second is service in amphibious units, and the third is sea service in detachments in cruisers, operational carriers, and in frigates.

Marines are trained at the Royal Marines Depot at Deal, and receive their basic training as soldiers at the Infantry Training Centre, at Lympstone in Devon. Every Marine is trained as a commando.

THE RESERVE FLEET — As in our own Reserve Fleet, since 1958 the Royal Navy has been carrying out a program for "re-shaping the Reserve." This has been a weeding-out process and a maintenance program, with the aim of building up a Reserve which will consist of sufficient ships of all classes, "held at short notice for service," in order to keep the operational Fleet up to strength, and to provide for the afloat support of the Fleet in emergency.

In the Reserve Fleet (including ships undergoing long refit, modernization and conversion) are 323 ships. This includes four aircraft carriers, three cruisers, 25 destroyers, 39 frigates, 24 submarines, 149 minesweepers and various other ships, such as landing vessels, minelayers, depot ships and coastal craft.

While the Royal Navy is not nearly as big as it used to be, the ships of the Commonwealth navies (as already mentioned) have increased in number and power. The Royal Navy, of course, works in close cooperation with the Commonwealth navies. Royal Navy submarines, for example, serve not only with the



AT SEA — Commando carrier delivers troops and equipment to trouble spot. *Rt: HMS Daring* off Malta.

Fleets of the United Kingdom, but with the navies of the Commonweath nations. The Fourth Submarine Division operates under the control of the Royal Australian Navy, the Sixth Division with the Royal Canadian Navy. The Seventh Submarine Division is stationed at Singapore.

IN PEACETIME, the ships of the Royal Navy, like those of our own, follow a tough training schedule. They also take part in disaster relief, salvage and searches throughout the world. In a typical case, following a hurricane that hit the West Indies, the frigate HMS *Ulster* was busy carrying food, clothing and building materials to the islands of Barbuda, Anguilla, Sombrero and Anegada. Three other Royal Navy ships took part in the rescue of a burning Norwegian tanker, despite the constant threat of explosion. After a week of towing and firefighting, they saw the tanker, its fires finally extinguished, at safe anchorage in Bahrain, in the Persian Gulf.

"Flag showing visits" — to foreign ports — are an important and traditional function. Her Majesty's Ships are to be seen all over the world, and not only at sea ports. Royal Navy ships have sailed up the Seine to Paris, up the Potomac to Washington, and more than a thousand miles up the Amazon.

The Royal Navy has a busy "exercise" schedule, which includes training with Commonwealth navies, and with NATO, SEATO (Southeast Asia Treaty Organization) and CENTO (Central Treaty Organization). The United Kingdom performs an important job as one of the leading nations in NATO. It participates in joint exercises in the Atlantic and the Mediterranean.

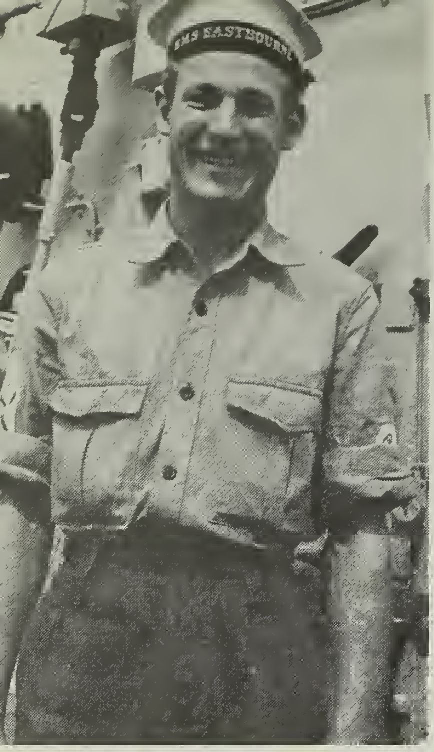
Typical of one of the largest of these exercises was a training maneuver conducted jointly by three NATO commands, SACLANT, SACEUR and CINCHAN (Channel Commander-in-Chief). A total of 120 ships of the Royal Navy joined in the exercise. Among the ships carrying out every aspect of naval warfare were two aircraft carriers, one cruiser, 27 destroyers and frigates, 37 minesweepers, 14 submarines, and 39 other vessels, including amphibious and support ships.

THE ROYAL NAVY is headed by the Admiralty, which compares roughly to our Navy Department. There is a Board of Admiralty made up of six naval officers and three civilians. At its head is a civilian, called the First Lord of the Admiralty, who may be likened to our Secretary of the Navy. The other civilians are the Civil Lord who represents the Royal Navy in Parliament and the Permanent Secretary who heads the Civil Service in the Admiralty.

The top naval representative is the First Sea Lord, who is the British counterpart of our Chief of Naval Operations. There are Second, Third and Fourth Sea Lords responsible for various departments, and a Fifth Sea Lord who is responsible for Britain's Fleet Air Arm.

Today's Royal Navy numbers approximately 100,000 officers and men. To get a brief picture of the organizational setup of personnel serving in Her Majesty's Navy, turn to the article on the next page.

ON THE DOUBLE — Commandos board *Whirlwind* copters for training.



Leading Seaman

Chief Petty Officer

Commander

Britain's Bluejackets

If you were living in Great Britain today and were hankering to "go down to the sea," you could enlist in the Royal Navy as early as the age of 15, as a Junior Entry.

However, the British don't use the term "enlist" or "enlistment." You "sign on," and your term of service in the RN is an "engagement," which is a rather interesting way of putting it.

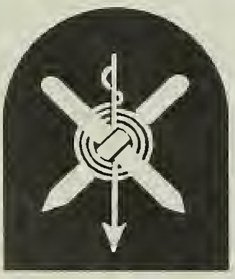
The Royal Navy is a very senior sea-going service, and many of its customs and traditions have become ours. But there are differences, and here are a few of them which should be worthwhile for the U. S. Navyman to know about.

Today, all recruits enter the Royal Navy (with the exception of a special category known as the artificer apprentice) on a "Long Service and Reserve Engagement." That is, your enlistment would be for nine years, if you entered the Navy over the age of 18. Service under the age of 18 is not considered "reckonable service," so if you joined Her Majesty's Service at the age of 15, your "engagement" would not be up until you reached your 27th birthday.

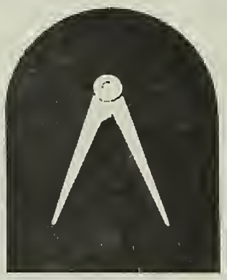
After serving the first nine years of your "long service," you may volunteer to re-engage for an additional five years, and finally for a further period of eight years. This brings your total service to 22 years, thus qualifying you for a retirement pension, plus a "terminal grant" which might be described as a lump-sum bonus payment.

If you don't choose to serve on active duty after completing the nine years you signed on for, the "Reserve Engagement" part of your contract goes into effect. That is, you automatically are enrolled in the Royal Fleet Reserve for a period of 12 years. While in the Royal Fleet Reserve you are paid a small daily "retainer," and you are liable to recall for service any time within the 12-year period in the event of a national emergency. Otherwise you can live a normal civilian life, following your regular pursuits.

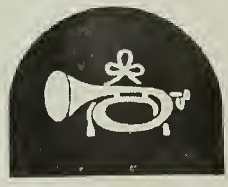
Today there are a total of 39 different ratings in the Royal Navy,



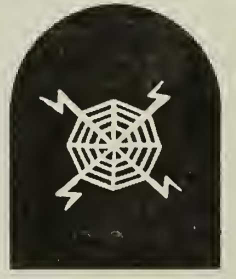
Torpedo and Antisubmarine



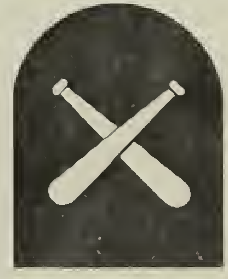
Navigator's Yeoman



Bugler



Radar Plot



Physical and Recreational Training

Coxswain

Surveying Recorder

Diver

Gunnery

Boom Defence

more than double the number existing back in 1935. In 1913 there were a total of 17 enlisted ratings. Two decades later, the rating structure had been increased only by one, but the technological developments of recent years have been responsible for as great a change in personnel specialties in the British Navy as in our own.

Here is a rundown on the rating structure in today's Royal Navy:

Seaman
Sailmaker
Regulating
Tactical Communications
Radio Communications
Engine Room Artificer
Mechanician
Engineering Mechanic
Shipwright Artificer
Ordnance Artificer
Electrical Artificer
Electrical Mechanician
Electrical Mechanic
Radio Electrical Artificer
Radio Electrical Mechanician
Radio Electrical Mechanic
Writer
Stores (Supply)
Stores (Victualling)
Steward
Cook (Officer's)
Cook (Ship's)
Sick Berth

Aviation Ratings
Naval Airman (Aircraft Handler)
Naval Airman (Safety Equipment)
Naval Airman (Photographer)
Naval Airman (Meteorology)
Aircraft Artificer (Airframe/Engine)
Aircraft Mechanician (Airframe/Engine)
Naval Air Mechanic (Airframe/Engine)
Aircraft Artificer (Ordnance)
Aircraft Mechanician (Ordnance)
Naval Air Mechanic (Ordnance)
Electrical Artificer (Air)
Electrical Mechanician (Air)
Electrical Mechanic (Air)
Radio Electrical Artificer (Air)
Radio Electrical Mechanician (Air)
Radio Electrical Mechanic (Air)

LET'S TAKE A QUICK look at some of the ratings. Since the Seaman Branch is the largest in the Royal Navy, we'll start off with that. The Junior Entry who at the age of 15 or 16 is recruited into the Seaman Branch, finds himself going through a period of indoctrination somewhat similar to that undergone by U. S. Navy recruits at Great Lakes Naval Training Center. However, the training period will be considerably longer, since the junior will be receiving educational instruction as well as naval training, and the recruit will be stationed on board landlocked "ships" called HMS *Ganges* or HMS *St. Vincent*. Both of these are actually shore establishments. Traditionally, the British call them by ships' names — and operate them as though they were ships. *Ganges* is located at a place called Shotley, near Ipswich, and *St. Vincent* is at Gosport, near the great Royal Navy base of Portsmouth.

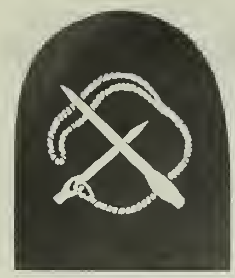
Going up the naval ladder the new recruit starts off as a *Junior Seaman 2nd class,* then *Junior Seaman 1st class.* Now he has graduated from his ship on shore, and is ready to go to sea as an *Ordinary Seaman.* Next he is an *Able Seaman,* then a *Leading Seaman.* From there he may advance to *Petty Officer* in his specialty, and after that become a *Chief Petty Officer.*

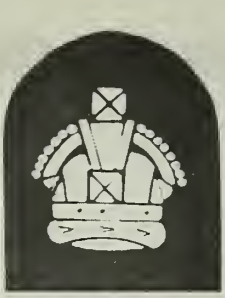
Looking at the list of ratings, you'll find that many of them are self-explanatory, but some are misleading, or perhaps confusing, to us. For example, the ship's writer is not a journalist; he would be listed as a yeoman in the U. S. Navy. And a chief yeoman in the Royal Navy is actually a signalman.

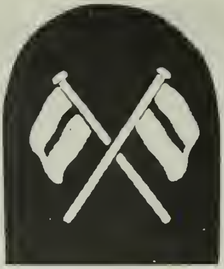
THIS IS HOW the various ratings in the Royal Navy fit into the different branches:

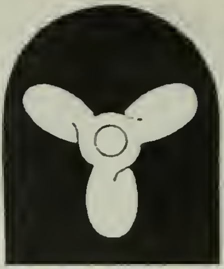
- ***Seaman Branch.*** Ratings include seamen who specialize in several categories, including gunnery, torpedo and antisubmarine; radar plot, surveying recorders, boom defense, sailmaker, coxswain, physical and recreational training, and diver.
- ***Communications Branch.*** Ratings include tactical communication operator (advancing to communication yeoman), and radio communication operator (advancing to radio communication supervisor).
- ***Engineering Branch.*** Ratings include engine room artificer, engineering mechanic, and mechanician.
- ***The Fleet Air Arm.*** Ratings in-

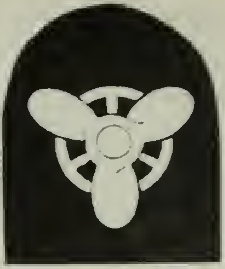
BRITISH NAVYMEN man stations on enclosed bridge of *HMS Tiger.*


Sailmaker


Regulating


Tactical Communication Operator


Engineering Mechanic


Mechanician

clude junior naval airman, advancing to naval airman second and first class, leading airman, petty officer airman and chief airman. Also includes aircraft artificer, naval air mechanic and aircraft mechanician, in the fields of airframes, aero-engines and aircraft ordnance.

- ***Electrical Branch.*** Ratings include electrical artificer, radio electrical artificer, electrical mechanic (leading to electrician), electrical mechanician, radio electrical mechanic (leading to radio electrician), radio electrical mechanician, and their air equivalents.
- ***Supply and Secretariat Branch.*** Ratings include writer, stores assistant (S) (Supply) and stores assistant (V) (Victualling), cook (O) (officer's cook), cook (S) (ship's cook) and steward.
- ***Sick Berth Branch.*** Rating includes sick berth attendant (leading to sick berth petty officer).
- ***Shipwright Branch.*** Rating includes shipwright artificer.
- ***Ordnance Branch.*** Rating includes ordnance artificer. (Ordnance categories in aviation come under the Fleet Air Arm.)
- ***Regulating Branch.*** Ratings begin with leading patrolman, and go up through regulating petty officer to master-at-arms.

The difference between the terms *mechanic* and *mechanician* may leave you somewhat confused, as does the word *artificer*. The rating of mechanician goes way back to the Royal Navy of pre-World War I days, and so does the term artificer. A mechanician may be described as a mechanic, only more so, that is with broader training. A man may start off as a mechanician apprentice, or he may be selected from a suitably qualified mechanic rating and given additional training. This training as a mechanician is comparable to serving what is called a "full trade apprenticeship."

Still higher in the echelon are the artificers. As an example, in the Engineering Branch, the artificers man all the most important positions in the engine and boiler rooms. In today's Royal Navy the artificers generally enter the service through a special "artificer apprentice" program, which provides for a five-year training period said to equal the "finest engineering training in the world."

In return for their skill and knowledge, artificers receive higher pay than other naval ratings, and quicker advancement. They are also offered excellent chances of promotion to officer rank.

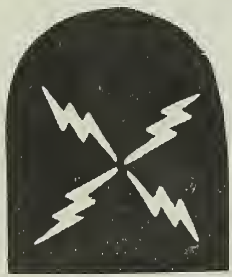
Successful candidates for artificer apprenticeships start their naval careers at HMS *Fisgard*, a special training establishment at Torpoint. The first eight months of this five-year period is the same for all; then the trainees enter their particular specialties. At the end of 16 months the apprentices go to different establishments to complete their training, receiving both theoretical and practical instruction in the operation and upkeep of the machinery and other equipment for which they will be responsible.

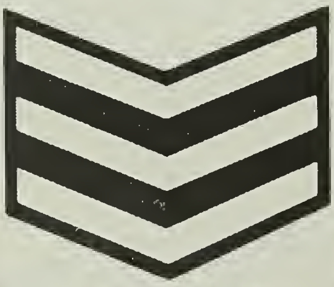
At the end of their fourth year, after successfully passing an examination they are rated artificer third class. On successful completion of their final year's training they are advanced to artificer second class, acting, a petty officer rating. An artificer may advance to a chief petty officer rating between the ages of 23 and 26, considerably faster than in the other branches of the Royal Navy. Because of the cost and length of their training, artificer apprentices must sign on for an active-duty "engagement" of 12 years, over the "reckonable" age of 18.

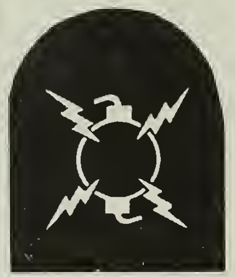
Enlisted men in the Royal Navy have an opportunity to be selected for officer commissions on either the General List (through a program known as the "Upper Yardmen" scheme) or on the Special Duties List. Eligibility is dependent on their age and their special qualifications. The various officer categories are discussed in further detail below.

THE OFFICER CORPS in the Royal Navy is not unlike that in the U. S. Navy, but as we have seen in the enlisted groups, there are differences. Officers may be grouped in four categories:

- ***The General List*** — This is the main body of officers of the Royal Navy, ranging from cadet to Admiral of the Fleet. Within this group, officers may go into three specializations: Seaman, Engineer, or Supply and Secretariat. These are the "career officers" and, generally speaking, they are graduates of the Britannia Royal Naval College, at Dartmouth, or the Royal Naval Engineering College at Man-


Electrical Mechanic and Radio Electrical Mechanic (with appropriate letter in center)


Good Conduct Badges


Electrical and Radio Electrical Mechanician (with appropriate letter in center)

Sick Berth

Aircraft Mechanician

Naval Airman (with appropriate letters beneath)

Radio Communication Operator

Supply and Secretariat (with appropriate letter in center)

adon. A selected number of officers on the General List are obtained from the enlisted ratings and from officers serving on the Special Duties List.

- ***The Special Duties List*** — This might be compared to the Limited Duty Officer and the former Warrant Officer programs in the U. S. Navy. The officers on the Special Duties List are promoted from highly qualified enlisted ratings, between the ages of 25 and 34. They may advance in rank from sub-lieutenant up through the grade of commander. They are selected on the basis of professional ability and personal and leadership qualities.
- ***The Supplementary List*** — These are officers entered in the Royal Navy for limited periods, generally for five years or twelve years, to fill vacancies in particular specializations. At present the list is open for seaman officers, electrical officers, and pilots and observers. Upon completion of this service they receive a sizable tax-free gratuity. (Some officers in this category are eligible to continue on active duty and qualify for retirement.)
- ***The Instructor, Medical and Dental Specialist Branches and the Chaplaincy Service*** — Graduates in these fields enter the Navy either as career officers or for specified terms, that is for "permanent engagement" or "short service engagement."

THE BRITISH EQUIVALENT of the Naval Academy at Annapolis is the Britannia Royal Naval College, Dartmouth.

An applicant enters Dartmouth as a cadet, and is provided, free of charge, with tuition, board and lodging, and articles of uniform and clothing. He also receives the sum of 12 shillings and sixpence a day ($1.75), from which is deducted a certain amount for recreational and other expenses. This allowance is increased when he becomes a midshipman.

His first year as a *cadet* is spent training at the Dartmouth College, and during this first year he is given a short period at sea in the Training Squadron. Then follows a year at sea in the Fleet as a *midshipman.* The third and fourth years, in the case of candidates in the Seaman and Supply and Secretariat specialties, are back at Dartmouth, where he concentrates on academic and professional naval courses. At the end of the fourth year the candidate obtains his commission and joins the Fleet in the grade of acting *sub-lieutenant.*

In the case of engineering specialists, the third year finds the officer candidate leaving Dartmouth to begin a three-year engineering course at the Royal Naval Engineering College, Manadon, or taking specialized training at Cambridge University.

Certain candidates who apply for a "short term commission" go to Dartmouth for just one year and then are appointed midshipmen for a year's training at sea. They then obtain Certificates of Competence and Watchkeeping Certificates, and are eligible to be promoted to sub-lieutenant and lieutenant as they progress during their short term of active duty. Some officers in this group are eligible to apply for a permanent commission and continue in the naval service.

The training of Royal Marine officers is approximately three years, and includes a series of courses to equip them for their duties ashore and afloat, plus one year's service in the Commando Brigade. There are no cadets in the Royal Marines; a candidate enters as second lieutenant on probation, and is promoted to acting lieutenant after two years and four months. Upon successful completion of his three-year course he is confirmed as a lieutenant.

Here are the ranks of officers of the Royal Navy and Royal Marines:

Royal Navy	*Royal Marines*
Cadet	
Midshipman	2nd Lieutenant
Acting Sub-Lieutenant	Acting Lieutenant
Sub-Lieutenant Lieutenant	Lieutenant
Lieutenant-Commander	Captain
Commander	Major
Captain (with less than 6 years' service in rank)	Lieutenant-Colonel
Captain (after 6 years' service in rank)	Colonel
Rear-Admiral	Major General
Vice-Admiral	Lieutenant-General
Admiral	General
Admiral of the Fleet	

This, very briefly, is a picture of the officer and enlisted structure in the Royal Navy of our ally, Great Britain. You'll find many other similarities, and differences, that are interesting and worth discussing. But the purpose here has been to whet your appetite. If you want to know more about the British Navy and its long and colorful history, there are many books on the subject. Check your ship or station library.

LOOKS FAMILIAR—Bos'n's pipe is sounded aboard *HMS Wild Goose.*

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept. Washington 25, D. C.

Requesting Submarine School

SIR: About six months ago I submitted a request for initial submarine training. At that time I was an RMSN serving a tour of shore duty. I have since been transferred to a ship, and have been advanced to RM3.

Must I resubmit my request, or do I just wait for some sort of answer to the first one? — R. K., RM3, USN.

• *Your request for submarine school is on file in the School Assignments Section of the Bureau of Naval Personnel. Approximately 150 other requests from RMs are also on file. The very earliest you could be ordered to sub school would be about April 1962.*

Normally, if a man is transferred after being placed on a waiting list, he should advise the submarine school assignment desk (Pers B2131) of his new duty address.

When your turn comes up for orders to submarine school, your command will be asked for an up-to-date evaluation. If you do not receive orders by April, you may resubmit your request indicating thereon the approximate date of your earlier request. — ED.

Geneva Conventions I. D. Card

SIR: Perhaps I am misinterpreting Article B-2106 of the *BuPers Manual*, but I contend an individual needs only one Geneva Conventions Identification Card, DD Form 528, and that the duplicate card mentioned in the article means the Armed Forces Identification Card, DD Form 2N (Active).

I have found in many service jackets two Geneva Conventions cards, and I know many real sharp Navymen in the administrative field who insist two Geneva ID cards are required.

Am I right? — W. F. F., HM1, USN.

• *You couldn't be more correct.*

Those real "sharp" men apparently read only the part of Article B-2106(1) which says: "The Geneva Conventions of 12 Aug 1949 for the Protection of War Victims provide for the issuance of identification cards in duplicate to persons who are liable to become prisoners of war. In the event of capture, one card will be surrendered to the capturing authorities, and the other card will be retained on the person of the individual so that he may identify himself at all times."

If you read only this part of the article, it could be interpreted to mean that two Geneva ID cards are required.

However, following this is the explanation which makes it all clear. The article continues, "The Geneva Conventions Identification Card, DD Form 528, is issued to naval personnel, serving on active duty, for surrender in the event of capture. The Armed Forces Identification Card, DD Form 2N (Active), is the card retained by the individual at all times."

This explanation leaves little doubt as to the meaning of the first part of the article. — ED.

Permanent and Temporary LDOs

SIR: I have a question concerning Limited Duty Line and Unrestricted Line officer designations. Can an LDO with a temporary appointment switch to the Unrestricted Line with a temporary or permanent appointment and eventually advance to flag rank with permanent appointment, or must he forever remain a temporary LDO, limited to the grade of CDR? — J.B.L., YN2(SS), USN.

• *Permanent LDOs may apply for transfer to the Line or Staff Corps and still retain their permanent officer status. A board meets each February to consider such requests (see "BuPers Manual," Art. C-1317).*

Temporary LDOs may apply for transfer to the Unrestricted Line or Staff Corps in accordance with BuPers Inst. 1120.12H, which outlines the Regular Navy Augmentation Program. If accepted, these officers receive permanent commissioned status, and thereafter compete with their contemporaries on an even keel. There is no limitation on the promotion of officers selected for augmentation. A selection board meets each quarter to consider applications.

Incidentally, temporary LDOs automatically become permanent LDOs upon promotion to the grade of LCDR. — ED.

Color Blindness

SIR: Quite a few people have told me that color blindness will disqualify a man for enlistment in the Navy.

I am color-blind. Does this mean I won't be permitted to reenlist after I have served my present enlistment? — L.A.B., DK3, USN.

• *You can reenlist. Color blindness was eliminated as a disqualifying defect for enlistment and reenlistment by BuMed Notice 6110 of 6 Nov. 1961.*

However, some Navy billets require color perception. Color blindness would disqualify you for such duties of course, and prevent your taking special training for them. — ED.

Rating Abbreviations

SIR: We Fleet Reservists are having a little argument about the official name of the rating BTC. I claim it is derived from the old CWT (Chief Water Tender) rating and now means Chief Boiler Technician. Am I right? — A.O., ex-USN.

• *Sorry, you are wrong about the present meaning of BTC. It is Chief Boilerman.*

You were apparently trying to be logical and assume that everyone is a technician of some sort in today's Navy. Logic doesn't always work.

Here's what happened: When, in 1948, the Water Tender rating became outmoded and became Boilerman, there had to be an abbreviation of some sort for the rating.

BM would, of course, have been the best abbreviation, but Boatswain's Mate had been using BM for a good many years. BT was adopted instead.

In 1956 the Boilermaker rating was established, and again the BM initials would have been appropriate. BR, however, was chosen this time. BRs are many times mistakenly called boiler repairmen.

There are several other ratings in the Navy in which this same situation exists, and you are not the first man in or out of the Navy to be wrong about one of them. — ED.

Military Status of OIC

SIR: I would like some clarification concerning the status of our commissary store.

I maintain the only reason the commissary has an officer-in-charge, a separate allowance, a diary and a listing in the *Catalog of Naval Shore Activities* is that it is under a different sponsoring bureau (Supplies and Accounts) than the Naval Air Station at which it is located.

I also think it is a part of the station, similar to a department.

The commissary store maintains it is an activity separate from the station, and that the only reason the station maintains its records, prepares its diary and administers non-judicial punishment and courts-martial for its personnel is because it desires this action.

The officer-in-charge of the commissary store, and his assistant, are ordered to report to the station CO for duty, as are all but two commissary personnel.

Can you give me the correct information on this subject?—W.C.C., PNCS, usn.

• *All commissary stores are established by the Secretary of the Navy in a SecNav Establishment Notice as an individual activity of the Navy generally under the military command of the activity where each store is located.*

They are under the military command of the commanding officer of the activity where they are located because they are support-type activities and, as such, must be responsive to the needs of the commands they serve.

Commissaries are not staffed to provide such services as legal assistance and personnel record maintenance.

These officers-in-charge do not, unless specially and specifically authorized, hold courts-martial or have non-judicial punishment authority. — Ed.

Backing and Veering, of the Wind

Sir: In the July 1961 All Hands you say that when the wind shifts in a clockwise direction it veers, and when it shifts in a counter-clockwise direction it backs. This statement only covers the northern hemisphere.

Hydrographic Office Publication 220 says: Back, of the Wind — To change direction in a counter-clockwise direction in the northern hemisphere and a clockwise direction in the southern hemisphere.

Veer, of the Wind — To change direction in a clockwise direction in the northern hemisphere, and a counter-clockwise direction in the southern hemisphere.

Hydrographic Office Publication No. 9, Bowditch's *American Practical Navigator*, says: When the wind shifts clockwise in the northern hemisphere and counter-clockwise in the southern hemisphere, it is said to veer. When the wind shifts counter-clockwise in the northern hemisphere and clockwise in the southern hemisphere, it is said to back.—Robert D. Kemp, QM1, usn, uss *Richard S. Edwards* (DD 950).

• *You are right—by those books—but we contend that we are right by common and international usage. The U. S. Navy Hydrogaphic Office tells us that most marine glossaries, especially those which include sailing ship terms, use our definition in either hemisphere. These reference books go even further and use the terms to describe a change of wind in reference to an individual ship. Thus, when the wind shifts from abeam towards the bow, it is said to haul forward. On the other hand, when it changes toward the stern, it is said to veer aft.*

NAVYMEN AND SAFETY superintendent of Naval Station, Long Beach, Calif., check traffic safety chart with Long Beach police officer.

The International Meteorological Congress, in 1905, defined "backing of the wind" as a shift in a counter-clockwise direction, or from north through west, south, east, and returning to north, in either hemisphere. A shift of wind in the opposite, or clockwise direction is further defined as "veering or hauling of the wind." The experts of the U. S. Weather Bureau quote the "Glossary of Meteorology," published by the American Meteorological Society in 1959, as stating that our definition is still the internationally accepted usage for the terms. However, the glossary further states that the definitions you cite from Hydrographic Office publications have widespread usage among meteorologists in the United States.

ROWS OF CROWS — Certificates and gift 'crows' for 280 newly rated POs of *USS Lake Champlain* (CVS 39) are checked by the CO.

The use of the terms veering and backing has been discussed in several meetings of the International Meteorological Committee. It has been suggested that more correct terms to describe a change in wind direction might be right or clockwise and left or anti-clockwise. This might be better, or it might only introduce additional terms to further confuse the situation. — Ed.

Two or Three-Year Tour

Sir: In reference to your explanation of sea and shore assignments for YNs after being graduated from "A" School (All Hands, September 1961): You indicate that all YN "A" school graduates receive three years of shore duty, if their enlistments are for six years. When I was graduated from YN school they sent me to Washington, D. C., for duty, where I served from May 1959 until June 1961, that is, two years. I was then transferred to a minesweeper in Charleston, S. C., without benefit of the three years ashore. Wha hoppen? — R. L. W., YNSN, usn.

• *First of all, you overlooked a couple of big ifs. Some (not all) "A" school grads on a six-year hitch are assigned ashore for three years,* if *they request shore duty and* if *a need exists for their talents ashore. This doesn't mean (to repeat something we pointed out in the September letter to which you refer) that all "A" school grads will definitely be assigned to shore duty. In your case, however, all this doesn't mean much. When you were assigned ashore, the three-year tour had not been established. Had it been, you probably would have received a tour of that duration, rather than your two-year shore assignment. The official word on this subject is contained in BuPers Notice 1306 (12 Sep 1960) and "Enlisted Transfer Manual" (7.22-d).*—Ed.

HOME SHOW—Arriving at Newport, R.I., from Operation *Unitas II*, two *USS Norfolk* (DL 1) sailors display symbolic dress of South Americans.

Super Chiefs on Seavey

Sir: In June 1961 I submitted my Seavey card, on which I asked for instructor or recruiting duty as primary choices. Since then I have been told that master chiefs are not being considered for this type of duty.

If this is correct, I would like to revise my shore duty preferences. Otherwise I stand very little chance of being assigned to an area of my choice. – K.E.P., AMCM, USN.

• *You've actually been hearing a little of what's happening now and a little of what was proposed several years ago.*

Master chiefs are assigned under the same Seavey-Shorvey procedures as other chiefs. It was proposed, at the time the warrant officer program was curtailed, that all E-9s be assigned by the warrant officer assignment desk. This proposal has since been disapproved, however, and master chiefs will continue to be assigned by enlisted personnel distribution centers.

E9s are, therefore, being assigned to both instructor and recruiting billets. – Ed.

Volleys at Military Funerals

Sir: Can you tell me why three volleys are fired at military funerals and give me the origin of the word volley? – C. P. R., SFCS, USN.

• *Like many customs, that of firing volleys at funerals is lost in the mists of antiquity and authorities vary as to its origin and significance.*

We consulted a volume which we consider authoritative, Naval Customs, Traditions and Usage – *by VADM Leland P. Lovette,* USN, *(Ret.). Here, in essence, is what he has to say on the subject.*

Firing volleys at military funerals is probably a holdover of the ancient custom of making loud noises in order to drive away evil spirits which escaped from the hearts of the dead.

The custom is at least as old as ancient Rome, and has been used by many peoples thoughout history. The use of firecrackers to frighten away evil spirits is still customary in the Orient today.

The reason behind the firing of three volleys is also lost in ancient history. In ancient Roman times, the name of the deceased was pronounced three times and the word vale *meaning farewell, was thrice repeated over the body.* Volley *and* vale *are pronounced more or less the same, which may account for the origin of the word volley.*

History is full of instances in which three is used as a mystic number. It is the number of the Christian Trinity and literature is replete with references to three in a mystical sense.

Volleys do not have to be fired over the grave and they are not always used at military funerals nowadays. There have been instances when the firing of volleys has had an unsettling effect on the bereaved. The firing of volleys is left to the discretion of the next of kin. – Ed.

INCOMING mail delivered at sea by COD flight plane is stacked on flight deck of *USS Ranger* (CVA 61).

Roosevelt Hook-Up Times

Sir: During recent weeks, the boatswain's mates and deck seamen of the First and Second Divisions aboard the attack aircraft carrier USS *F. D. Roosevelt* (CVA 42) have achieved the following hook-up times (from "messenger on deck" to "commence pumping") with Fleet oilers of the Sixth Fleet.

Station No.		Time Minutes	
1	AvGas	3	USS *Salamonie* (AO 26)
3	NSFO	3 (Twice)	USS *Salamonie* (AO 26)
		3	USS *Aucilla* (AO 56)
5	JP5	7	USS *Aucilla* (AO 56)
7	NSFO	3	USS *Salamonie* (AO 26)

It should be noted, too, that our Station No. 5 is a double rig, and times include hooking up both hoses. Also, all of our single-hose rigs have been with USS *Salamonie,* the oldest oiler in active naval service.

We feel that we may have set some records. Through stating our case in your column, we hope to find out from other readers just how good we are. —E.T.F., BM2, USN.

• *We're not going out on a limb – but those are mighty good times. We imagine you'll be hearing from our readers.* – Ed.

Choice of Ship

Sir: I was very interested in an article in your October issue on ships to be commissioned within the next 18 months.

I spent my first hitch in the Navy aboard a destroyer, and consider myself a destroyer-cruiser type of sailor. Since my first hitch, however, I have had every kind of duty except the kind I like best.

Since the Navy is building a lot of new ships, especially DLGs and CLGs, I think my chances for getting assigned to one of them should be pretty good. The trouble is, I don't know how to go about putting in a request for that kind of duty.

If you can tell me how many of these ships are being assigned to the Pacific Fleet and how to get on board one, I'm on my way. – J. R., Jr., SD3, USN.

• *The first step for you to take is*

to submit a NavPers 1339 via your commanding officer to CO, EPDOPAC, requesting the assignment you want.

Any other information (well, almost any other information) you may want concerning assignment to new construction can be found in Chapter 15 of the "Enlisted Transfer Manual" (NavPers 15909A).

With regard to the number of ships being assigned to the Pacific Fleet, we will pass on to you the answer we received when we inquired. "Sorry, that information is classified." — ED.

Destroyermen, Hear This

SIR: The Naval Destroyer School, Newport, R. I., is engaged in a search for black and white photographs of destroyers in action. We have attempted to obtain such photos through standard Navy sources, but have found, for the most part, that about the only pictures available are of ships entering port or proceeding independently.

The object of our search is to provide action photos which are suitable to exhibit in the lobby and passageways of the school: DDs making full power runs; engaged in high speed maneuvers; during storms; while firing guns, etc.

We suspect that amateur shipboard photographers take thousands of such pictures each year. If anyone has a sharp negative, we would be happy to make a mural-sized print and display it at the school. Credit will be given the photographer. Black and white negatives, preferably made from a fine-grain film, are what we need. After we've made display copies, we'll return the negatives to the donors. — T.E.B., CDR, USN.

- *Negatives should be addressed to the U. S. Naval Destroyer School, Attn: CDR T. Bass, Newport, Rhode Island.* — ED.

Name for Lake Champlain Hero

SIR: While doing some research on old ships (my hobby) I noted a brief reference to USS *Cassin* (DD 372), a World War II destroyer. The name Cassin is not a common one, and I am curious regarding the background of the ship and the man for whom it was named. — T. C. C., ex-USN.

- USS Cassin *was named in honor of CAPT Stephen Cassin,* USN, *who entered the Navy as a midshipman in 1800, served with distinction in Tripoli and commanded* Ticonderoga *in the Battle of Lake Champlain (War of 1812). For the latter he was awarded a gold medal by Congress — for "gallantry in repelling repeated attacks by four enemy gunboats." He died 29 Aug 1857.*

The destroyer Cassin *was launched on 28 Oct 1935; Mrs. Helen Cassin Lombard, a great-granddaughter of the captain, served as sponsor.* Cassin *was listed as "lost" after the attack on Pearl Harbor, but, in 1944, came back to earn seven battle stars. She was taken out of commission in 1947.* — ED.

SITTING PRETTY — Queen of *USS Turner* (DDR 834), Miss Elizabeth Karpen, poses with her escort, Edward Reszkowski, RMSN, USN.

Air Gunnery Score

SIR: We have been unable to uncover any instance where the competitive gunnery results of an F8U squadron have come even close to the scores chalked up by the pilots of VF-91 in the air-to-air exercises at Yuma, Ariz., this spring.

So far as we know, our Alameda, Calif., based squadron shattered all COMPEX scores to date for both Atlantic and Pacific Fleet F8U exercises.

For gunnery at 20,000 feet, 17 of our pilots scored two E's and received 10 qualifying marks. At 30,000 feet, six more E's and two qualifying scores were added, and in air-to-air camera exercises at 40,000 feet, we racked up 12 more E's and still another qualifying score.

We think these results are nothing short of amazing, considering the complexity of the equipment, logistical requirements and required coordination. It is a good example of what can be accomplished by an air squadron after months of intensive preparation and work on the part of all hands.

An additional result has been achieved from these gunnery successes. This is the inculcation of a genuine "go-get-em" spirit in all pilots and crewmen, which is most essential in a fighter squadron.

Therefore, VF-91 throws down a challenge to other *Crusader* squadrons. Beat it, if you can. — C. E. Rich, CDR, USN.

- *Any takers?* — ED.

Delta Drum and Bugle Corps

SIR: Your featured article on the Navy's unofficial musicians (ALL HANDS, April 1961) was read with great interest on board the Pacific Fleet's USS *Delta* (AR 9). We regret our own musical organization — the *Delta* **Drum and Bugle Corps** — was not far enough along in organization to be included in your story.

To our knowledge, the *Delta* **Drum and Bugle Corps** is the only one based aboard ship, and one of the few in the naval service. (We know of drum and bugle corps at the Naval Academy, some NROTC Units and the NTCs.)

The *Delta* corps is completely equipped with valve bugles, and our musicians have a large and varied repertoire. The reputation of the group is spreading, and many requests for special showings are coming in every month. The departures and arrivals of ships based at Long Beach, Calif., our home port, are now marked with appropriate music by *Delta's* musicians.

The corps is all *Delta* in composition, but the men consider themselves One. — CDR W. M. Robinson, USN., USS *Delta*.

- *Thanks for the word on more unofficial musicians. Readers on board* USS Wallace L. Lind *(DD 703) informed us that they, too, have a group of part-time musicians* (ALL HANDS, *Letters, Oct 1961) not mentioned in the April feature, but, to our knowledge, yours is the only drum and bugle corps comprised of after-hours virtuosos.*

Incidentally, for skeptics who think the bugle is an easy instrument to play, an ALL HANDS *staffer (a trombonist in civilian life), who tried it at NTC San Diego while going through boot camp, found it tough making pretty sounds with no slide or keys to go along with lip toots.* — ED.

TOP HEAVY — USS *John King* (DDG 3) appears to have double superstructure while alongside *USS Yellowstone* (AD 27) to transfer ammo.

Attention: Youngest CPOs

SIR: Navy Attack Squadron 56, aboard USS *Ticonderoga* (CVA 14), thinks it has something pretty unusual in the person of Chief Aviation Electronics Technician Garveno F. Flores. The reason we think so is that Chief Flores was only 23 years old when he made chief last November.

Chief Flores entered the Navy in February 1955 — and went up the ladder but quick. He was advanced to third class in 1956, and made second class in 1957. By 1958 he was a petty officer first class.

He has attended both Class A and B schools during his short Navy career, and joined our attack squadron after he left Aviation Electronics B School at Memphis, Tenn., in September 1960.

We are proud to have the man we believe to be the youngest chief in the Navy. — W.H.H., LTJG, USN.

- *Many years of experience have taught* ALL HANDS, *when it comes to commenting on records, to follow the lead of Br'er Rabbit. Hence* ALL HANDS *will lay low and say nothin' — well, almost nothin'.*

We remembered a man named John B. Lipinski, who made chief at the age of 24 (ALL HANDS, *June 1960).*

This same man made first class at the tender age of 20. At that time (1955), the claim was made by his shipmates that he was the youngest PO1 in the Navy.

This raised the ire of other youthful PO1s who had records to grind, and a tide of letters washed over the prone figure of our editor. Several of the claims were printed in the July 1955 issue of ALL HANDS.

The end result was that Chief Yeoman Edward E. Kemp upset the record with his claim of having made PO1 at the age of 17. He used the sneaky tactic of enlisting in the Navy when he was only 15 years old.

Incidentally, the ALL HANDS *staff once included a Navyman who joined up when he was 16 years old and made chief at the age of 19 years, eight months and nine days. His name is Earl E. Smith; now retired.*

Our statistical experts have this comment to add: "As a matter of record, in December 1959, there were two CPOs whose age was recorded as 23."

Now that we have pointed out the perils of claiming records in these columns, and that there has been at least one younger chief, we congratulate Chief Flores on his truly remarkable climb to responsibility. We also throw his record (as the youngest chief currently serving in the Navy) up for grabs. — ED.

Right Side Down

SIR: There was an inverted picture of USS *Greenwich Bay* (AVP 41) on page 29 of the October issue of ALL HANDS Magazine which I received. I mentioned it to several people and wondered why they began looking at me as though I were some kind of a nut.

I really got a shock when I visited the main recruiting station at Pittsburgh and picked up a copy of the October issue, turned to page 29 and found that *Greenwich Bay* had righted herself.

I came back home, cut out the page and am enclosing it with this letter so you won't send for the men in the white jackets. — J. R. C., AMHC, USN.

- *We are glad you didn't ask us for an explanation of how it happened. The picture in our advance copy and the copies we received for staff use all showed* Greenwich Bay *on an even keel, so the printer evidently caught the mistake before too many copies were run off.*

At any rate, let this be a vindication of your good name. Know Ye All Men By These Presents. *Anyone knowing a chief who went around talking about an upside-down picture which appeared in the October issue of* ALL HANDS *Magazine take note. He is not off-balance; he actually had a copy in which* USS Greenwich Bay *was sailing mast down.* — ED.

What Happened to Breese?

SIR: Have you published a history of USS *Breese* (DM 18)?

I served aboard her from December 1943 until December 1945. When I left her, she was at Staten Island, N. Y., where she was supposedly sold for scrap. — W.C.F., PN1, USN.

- *The keel of* USS Breese *(DM 18) (Ex-DD 122) was laid on 10 Nov 1917. She was launched as a destroyer in May 1918, and was converted to a minelayer in 1931.*

Breese *sailed for Pearl Harbor from San Francisco in December 1940. In the year before the Japanese surprise attack, she took part in Fleet maneuvers and patrol missions.*

The day the Japanese struck, Breese *was moored to the ready duty buoy and was officially credited with one Japanese plane.*

During the next several months, she patrolled the waters off Hawaii on the lookout for enemy submarines known to be lurking there.

Frequent contacts were made and many ash cans dumped overboard. Many of them undoubtedly exploded against marine life or shoals but it can be logically assumed that Breese *contributed to the prevention of further submarine attacks on shipping within the harbor.*

In April and May of 1942 Breese *maintained a constant patrol around* USS Argonne *(AG 31) near Canton Island while* Argonne's *men worked aboard the* President Taylor, *an Army transport ship, which had run aground there.*

In June 1942, while she was on escort duty, she was ordered to pick up survivors of USS Yorktown *(CV 10) following the Battle of Midway. She returned to Pearl Harbor with 84 of* Yorktown's *men.*

The remainder of 1942 was spent in escorting, screening and minelaying in the waters of the South Pacific.

In 1943, Breese's *old four-inch guns were replaced by new dual purpose armament and she was given additional cruising capacity. Fire control equipment and radar were installed.*

During the invasion of the Russell Islands, Breese *offered protection and guidance to the LCTs that unloaded troops there and laid offensive minefields close under the Japanese shore batteries at Bougainville.*

Japanese recon planes flew over the minelayers and dropped flares making them good targets.

When cruisers and destroyers intercepted a Japanese task force which was bearing down on the mine forces *and the landing beach, one of the decisive battles of the Pacific was fought.*

Breese arrived with the minesweeping and hydrographic forces which set up shop in advance of the attacks on Leyte, Lingayen Gulf, Iwo Jima and Okinawa to participate in the force's operations. Here she laid mine case buoys to mark danger areas or mark the extent of swept water as she followed the sweeping vessels.

At Leyte, she shot down an enemy torpedo plane. She was under continual air attack for four days.

Breese was clearing the lanes of the East China Sea for U. S. carrier task forces when word was received on 10 Aug 1945 of Japanese peace overtures. In October, she was on her way home loaded with officers and men eligible for discharge.

Breese won 10 battle stars and the Asiatic Service Medal. She was struck from the Navy List on 7 Feb 1946.

Breese was sold for scrap in Philadelphia, Pa., on 16 May 1946. — Ed.

Colors Before 0800

Sir: *Navy Regulations* specify that colors are to be held at 0800. Does this mean that colors should be cased during any ceremony before 0800? You may be interested in the story behind this question.

I was detailed by our air squadron to form, equip and drill a color guard for use in squadron formations and ceremonies. I followed the procedure set forth in the *Landing Party Manual.*

Our inspections and formations are usually held between 0600 and 0700 in regimental order. The national colors and infantry flag are presented to the color guard on orders from the regimental commander by the adjutant and regimental CPO.

Because *Navy Regs* specifies that colors are to be held at 0800, several Marine officers attached to our squadron contend the national ensign should be cased until that time.

However, according to DNC-27 (*U. S. Naval Flags and Pennants*), colors may be carried in any formation in which two or more companies participate. It does not specify whether colors should be cased or uncased before 0800.

My interpretation is that colors may be presented to the regiment, uncased, before 0800, and, if in formation at 0800, honors should be rendered in accordance with *Navy Regs.* — W. A. E., AKCM, USN.

- *You are correct. "Navy Regs" (Art. 2107) refers to the ceremonial hoisting and lowering of the national ensign at 0800 and sunset. As you noted, it doesn't say colors should not be displayed or carried at other times.*

"The Landing Party Manual," Art. 3-14 (b) and (c), provides information on the displaying of colors after sunset and (Art. 3-15) during ceremonial parades. This includes passing in review after evening colors, which could be any time before 0800.

Incidentally, ships at sea frequently display the colors from first light to dark. — Ed.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Idaho* (BB 42) — The fifth annual reunion will be held at the Golden Triangle Hotel, Norfolk, Va., on 20, 21 and 22 July. For details, write to the USS *Idaho* Association, P. O. Box 8048, Norfolk 3, Va.
- USS *Kidd* (DD 661) USS *Black* (DD 666), USS *Chauncey* (DD 667) and USS *Bullard* (DD 660) — A joint reunion of crew members will be held in Asbury Park, N. J., on 10, 11 and 12 August. For further information write to Harrold Monning, 310 East 8th St., Kewance, Ill.
- USS *Langley* (CV 1) — All officers who served on board, and who are interested in holding a reunion on the East Coast this spring, are invited to write to LCDR Richard L. Merkel (MC), USNR (Ret), 302 National Reserve Building, Topeka, Kan.

Waiver for Submarine Duty

Sir: Last April I took my GCT for the second time, in hopes I could raise it to meet the minimum requirements for initial submarine training.

Unfortunately, I didn't make any substantial gain. It has occurred to me, however, that I may be entitled to some kind of waiver which would enable me to qualify for Submarine School.

If this is a possibility, can you tell me who I should see and how to approach the matter? — L.D.L., SK2, USN.

- *We are afraid you are out of luck, at least temporarily. The SK rating has only recently been authorized for the submarine program, and there is an allowance for only one SK per conventional sub (two for SSBNs).*

At the present time, there are enough applicants who meet the test score requirements, so there is no immediate possibility the score requirements will be waived.

If a shortage of SKs develops, however, things may be different. — Ed.

. . . how to send ALL HANDS to the folks at home

Superintendent of Documents
Government Printing Office
Washington 25, D.C.

ENCLOSED find $2.50 for a subscription to ALL HANDS magazine, the Bureau of Naval Personnel Information Bulletin, to be mailed to the following address for one year

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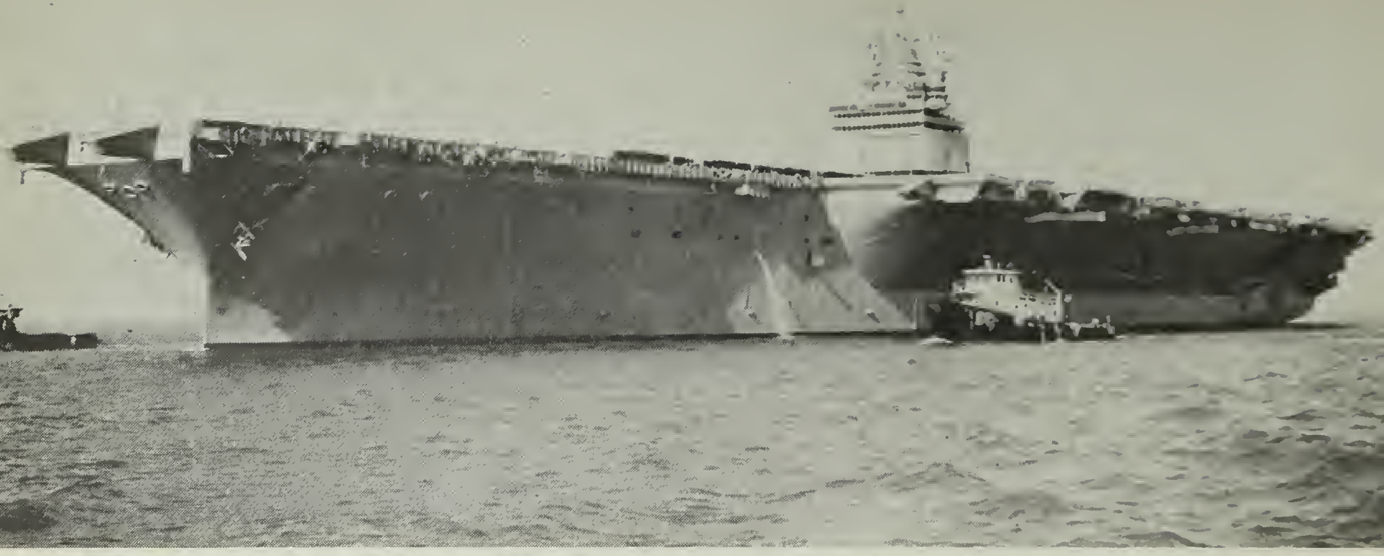
(For prompt filling of orders, please mail this blank and remittance direct to the Government Printing Office. Make checks or money orders payable to the Superintendent of Documents.



PORT SIDE — High-powered *USS Enterprise* (CVAN 65) will be able to travel fast and far without refueling.

The Enterprise Story

The name Enterprise *is as old as the U. S. Navy. There have been eight ships called* Enterprise *in the sea service, and in a sense their story is a brief history of the Navy itself. From sail to steam, from fuel oil to nuclear power, they represent different stages in the evolution of a United States Ship. And the* Enterprises *have made a name for themselves as fighting ships, out on the front lines in the Atlantic and the Pacific. Here is their story, the story of enterprise in the U.S. Navy.*

THE FIRST *Enterprise* began life as a 70-ton sloop which originally belonged to the British and was used by them on Lake Champlain to supply their posts in Canada. In May 1775 she was captured in a raid led by Benedict Arnold, named *Enterprise* and fitted out with 12 long four-pounders and 12 swivel guns. This first *Enterprise* set a precedent of brisk activity which was to be followed, in the main, by most of her successors.

Under the command of Captain John Dickenson she participated in the battle of Valcour Island in October 1776.

Although the Americans were defeated in that battle, the attack delayed for several months the plans of the British to separate New England from the rest of the colonies. This ultimately led to British defeat in that theater of war and resulted in the French entering the conflict on the side of the colonies. The French fleet played a crucial role in the war at a later date.

During the advance of General Burgoyne in the summer of 1777, *Enterprise,* with two schooners and two galleys, was given the job of convoying bateaux in the evacuation of ammunition, stores and refugees from Ticonderoga. They were no match for the vastly superior British fleet, which overtook and destroyed the bateaux with their cargoes. The two schooners were captured, but *Enterprise* and the two remaining galleys were run ashore and burned to prevent their falling to the enemy. The crews carried on in other ships.

THE SECOND *Enterprise,* which also had a brief but active life, was an eight-gun schooner of 25 tons, with a crew of 60 men. Granted a letter of marque from Maryland, she made a remarkably successful six-month cruise in 1776, and then was bought by the Continental Congress.

She served chiefly in convoying transports in Chesapeake Bay. She was also active in reconnoitering the enemy's ships and preventing their tenders and barges from getting supplies from the shores of Maryland and Virginia.

The records show that she was returned to the Maryland Council of Safety in 1777.

THE THIRD *Enterprise* was a 12-gun, 135-ton schooner built in 1799 at a cost of $16,240. She was worth every cent of this sum, even in those days of scarce money. Her career, which was remarkably active — and lucky — extended from the naval war with France, through the fighting with the Barbary pirates and the War of 1812. Between wars, she chased and captured pirates.

During the quasi-war with France she recaptured 11 merchantmen and several armed privateers. She returned to Baltimore with the expectation of being sold, but found herself redeemed in the light of her outstanding achievements. She was retained in service despite a reduction in the Navy which left only 13 frigates in her company.

Enterprise began her Barbary stint when she sailed from Hampton Roads, Va., with the squadron of Commodore Richard Dale on 1 Jun 1801.

About seven leagues to the westward of Malta on 1 August she fell in with the Tripolitan corsair *Tripoli,* manned by Rais Mahomet Rous, and mounting 14 guns.

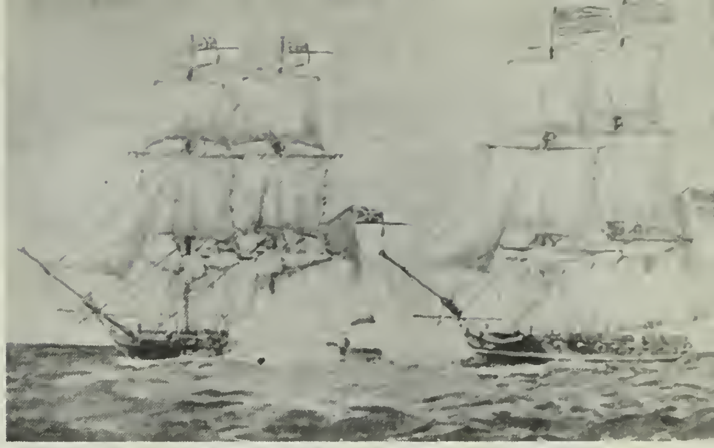
A fierce action commenced when the two ships were within pistol range. *Enterprise* fought off three attempts to board her. The enemy's masts and rigging were cut to pieces with 18 shots between wind and water, and she suffered terrible carnage on her deck, having 20 men killed and 30 wounded. Among the wounded was the Tripolitan commander, who twice struck his colors in a pretense of surrender, only to re-open fire at a more advantageous moment and hoist his flag again. He finally threw his ensign into the sea and, by gestures, begged for quarter. *Tripoli* had three of her masts shot away, and her mizzenmast went over the side as an American crew boarded her to throw overboard her guns, anchors and cables. *Enterprise* did not suffer one man killed or wounded, and she sustained no material damage. As a reward for this action the commanding officer, Lieutenant Andrew Sterrett, was presented a sword by President Thomas Jefferson, and all other officers and men of *Enterprise* were rewarded with a month's extra pay.

ENTERPRISE spent much time carrying dispatches, enforcing the blockade off Tripoli and convoying merchant ships in the following months.

However, Lieutenant Isaac Hull had hardly taken command when the ship ran a 30-ton enemy craft ashore under enemy batteries on the coast of Tripoli on 22 May 1803. The enemy cavalry came charging out of the town to prevent her men from hauling off the abandoned prize. For the next two days she scattered shot among the enemy gunboats that came out of the harbor for a burst of fire then quickly drew back to shallow water and out of range.

On the night of 2 Jun 1803, seven armed boats of the squadron made for the shore of Old Tripoli Bay, where more than a thousand of the enemy had drawn up behind a barricade of 12 wheat-laden craft and shore structures. Musket fire from men in five boats kept the enemy at bay while two boats went among the enemy craft and set them ablaze. The raiders returned to their respective warships some two hours later without the loss of one life.

Enterprise remained on her Mediterranean station until August 1807, when she returned to the States for repairs and new assignment.


TOUGH FIGHTER — Lucky Little *Enterprise* is shown in one of her famous battles, capture of *Boxer*.

FIVE YEARS LATER she was at sea when war was declared against Great Britain. Her most notable exploit in this war occurred in 1813 during her search for British privateers near the coast of Maine.

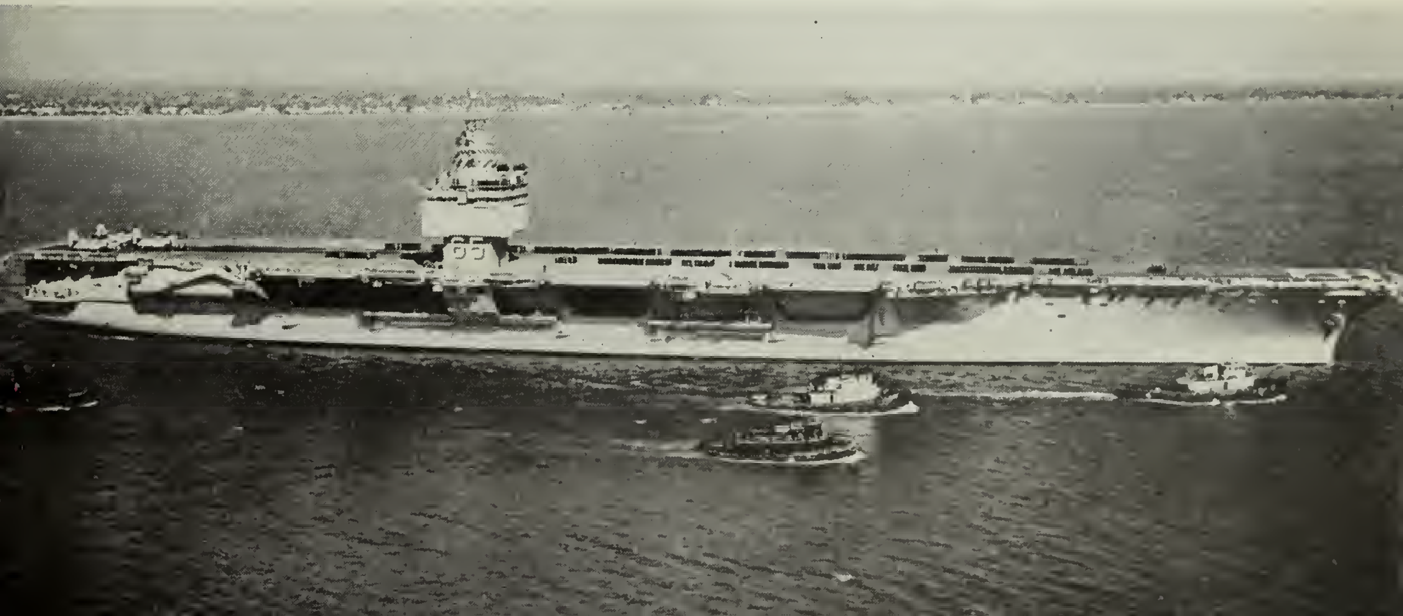
After chasing a schooner to the shore on Wood Island, *Enterprise* discovered what appeared to be a ship of war in the bay near Penequid Point. She immediately gave chase, and soon found her quarry to be the British brig *Boxer*, mounting fourteen 18-pounder carronades and manned by 72 men. When within half pistol shot, broadsides exchanged by the two brigs brought death to Lieutenant William Burrows, then commanding officer of the *Enterprise*, as well as to the British commander, Captain Samuel Blyth.

Another broadside was exchanged before *Enterprise* ranged ahead to cross *Boxer's* bow. She kept up a deadly fire until the enemy hailed and said they had surrendered but could not haul down the colors, which were nailed to the mast.

Boxer was escorted into Portland, where a common funeral was held for the two commanders — both well known and favorites in their respective services. *Enterprise* had four men killed and 10 wounded as the result of this action, while *Boxer* had seven killed and 14 wounded.

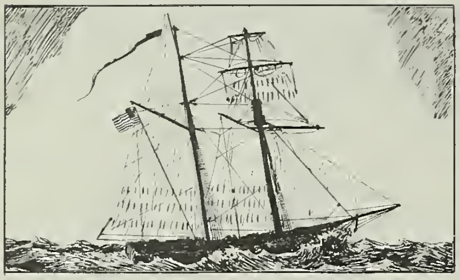
Waters off the East Coast, Florida Keys, Cuba, and along the Gulf sea frontier were her cruising ground for the remainder of her service. (*Cont. on page 34*)

STARBOARD SIDE — Carrier's island, without need for stacks, is able to contain more electronic gear.

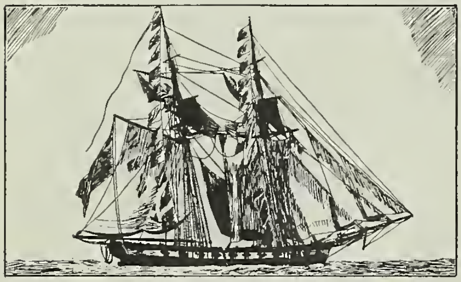


USS ENTE

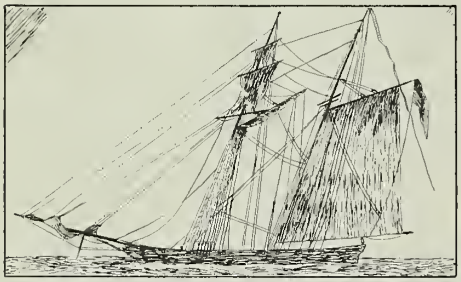
★ 1 **1775-1777**
Sloop of the Revolution



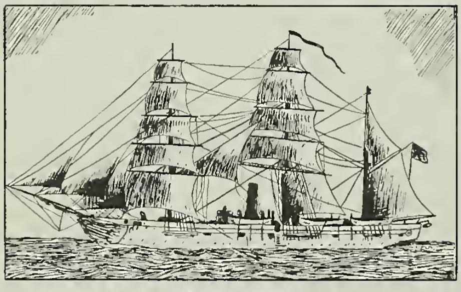
★ 2 **1777**
Armed Schooner*



★ 3 **1799-1823**
'Lucky Little Enterprise'



★ 4 **1831-1844**
Ten Gun Schooner*



★ 5 **1877-1909**
Steam Corvette

*Drawn from similar type of ship.

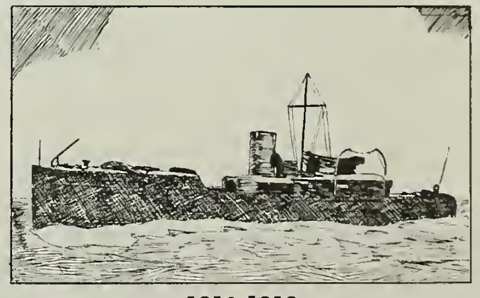
• BY SAIL —Navymen serving in early ships named **Enterprise** won many heroic battles against the odds.

★ 1 The first **Enterprise,** serving from 1775 to 1777, was a sloop that had been captured from the British. She fought for freedom on Lake Champlain under command of Benedict Arnold.

★ 2 The second ship named **Enterprise** was an armed schooner that served a short but useful period during the Revolution, convoying troops and patrolling waters of the Chesapeake Bay in 1777.

★ 3 **Enterprise** number three (1799-1823), was a 12-gun schooner that had a great career in the war with France, against the Barbary pirates and in the War of 1812 against the British.

★ 4 The fourth ship to be named **Enterprise** was a 10-gun schooner that served with the Fleet from 1831 to 1844. She ranged as far away as Asia, but served most of her career in South American waters.



★ 6 **1916-1919**
World War I Patrol Vessel

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Prepared by ALL HANDS Magazine

PRISE 1775-1962

w members of **En-**
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power.

• BY OIL —Hard-fighting crew and pilots of CV 6 established great record during World War II.

• BY ATOMS —Navymen on board the new, record-setting **Enterprise** are on the alert to preserve peace.

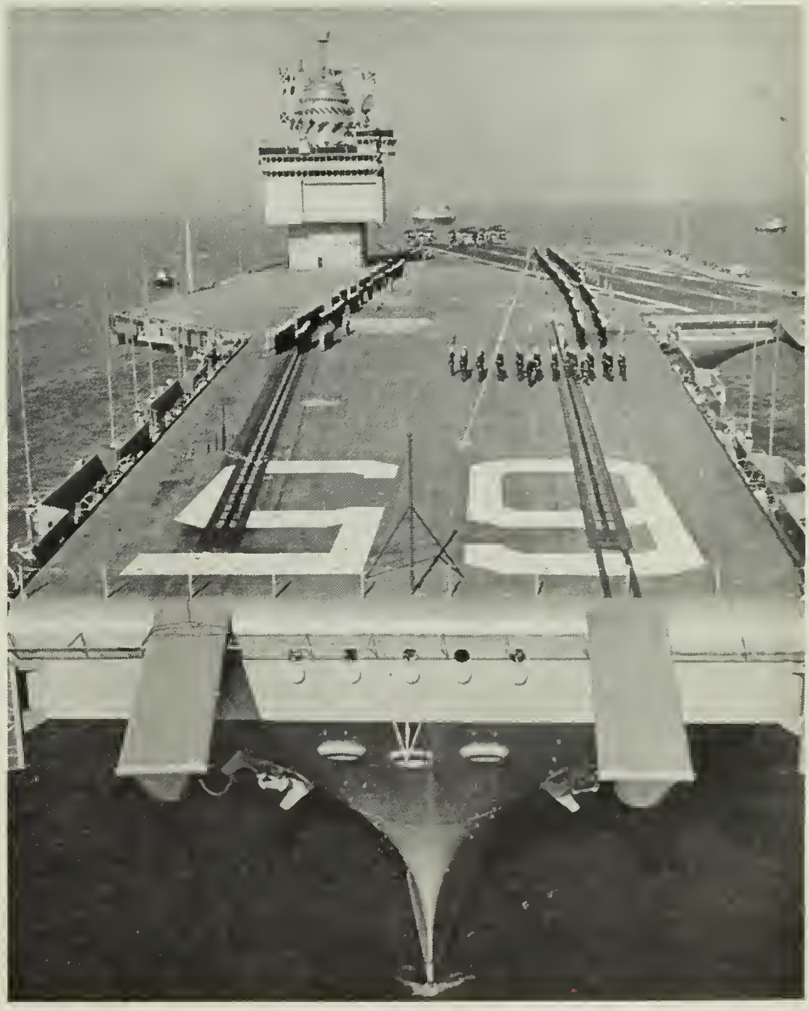
umber five served from 1877 to 1909.
eam corvette with auxiliary sail power,
from the Amazon to Australia until
she was converted into a training ship.

bear the name **Enterprise** was a former
it converted into a motor patrol craft.
craft performed harbor duties at New-
nd New Bedford, Mass., until 1919.

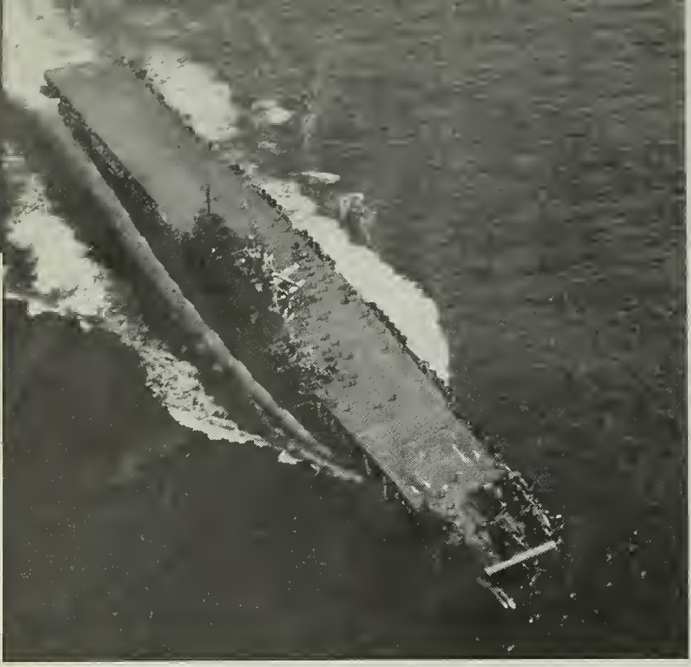
ship to be named **Enterprise** was CV 6,
carrier commissioned in 1938. During
II she earned the PUC, NUC and 20
as well as the nickname, "Big E."

iclear-powered carrier **USS Enterprise**
is ship number eight. She has a length
t, displacement near 85,000 tons,
elled by eight nuclear power plants.

1938-1956
5, The 'Big E' of WW II



Today
USS Enterprise (CVAN 65), Nuclear Powered Carrier



CARRYING ON in the tradition of forebears, *USS Enterprise* (CV 6) pounded enemy in World War II.

(*Continued from page 31*)

She devoted herself to the control of smugglers, pirates and slave ships which operated between the United States mainland and ports of the Caribbean. She took no less than 13 prizes, including several ships of the noted Spanish pirate, Gibbs. She also broke up the rendezvous of the notorious pirate Jean Lafitte at Galveston. Her career came to an end on 9 Jul 1823, when she ran aground and was wrecked at Little Curacao in the West Indies, without loss of life or injury to her crew.

THE FOURTH *Enterprise* was a 197-ton schooner built by the New York Navy Yard, where she was launched on 26 Oct 1831. She was armed with ten 24- and 9-pounder guns. Her original complement was nine officers and 63 men.

She spent most of her 13-year career cruising the South Atlantic, protecting U.S. interests during the frequent revolutions of that time and place. In 1835, however, she (in company with the sloop *Peacock*) set out on a cruise around the world. Ports of call included Zanzibar, Bombay, Colombo, Batavia, Macao and Honolulu. She resumed her South American tour in 1837, this time on the west coast. Withdrawn from service in 1844, she was sold the following year.

THE FIFTH *Enterprise* demonstrated the change in shipbuilding trends. A steam corvette with auxiliary sail power, she was launched on 13 Jun 1874 and placed in commission 16 Mar 1877. She displaced 1375 tons, had a speed of 11.4 knots and carried a complement of 20 officers and 164 enlisted men. Her original armament was one 11-inch smoothbore, four 9-inch broadside guns, one 60-pounder pivot, and one short Gatling gun.

Her career also illustrates a shift in mission. She not only performed survey duty on the Mississippi River and the Amazon and Madeira Rivers in South America, but spent some three years (1883-86), on a hydrographic survey cruise which added much to our existing knowledge of the seas and waterways.

Taking depth soundings at intervals of one hundred miles, she steamed by way of the Cape Verde Islands to the Cape of Good Hope, thence across the Indian Ocean to the Sunda Strait. She departed Batavia, Java, on 19 Sep 1883 and, in the following months, steamed along the coast of China and to Rose Island, Korea and Japan. She was present at Foochow, China, on 23 Aug 1884 when seven French gunboats under Admiral Courbet engaged a fleet of nine Chinese warships off the Pagoda Anchorage and bombarded the Navy Yard. During and after the battle, *Enterprise* sent her steam cutter to render assistance to the wounded and drowning of both sides. She continued survey operations off the coasts of China and Japan until 28 Jul 1885, when she departed Hong Kong on her way to Surabaja, Java (10-16 August); Albany, Australia (6-8 September); Melbourne, Australia (16 September-15 October); and Wellington, New Zealand (25 October-6 November). She passed through the Strait of Magellan on 19 Dec 1885, bound — by way of Montevideo, Uruguay; Bridgetown, Barbados; and St. Thomas, Virgin Islands — to New York, where she arrived 17 Mar 1886.

In 1891 she was assigned as a cadet training and practice ship at the United States Naval Academy. Later, she was loaned to the Commonwealth of Massachusetts to serve the Public Marine School of Boston as a seamanship practice ship for Merchant Marine cadets. This career continued for 17 years, during which she often cruised in waters extending from Boston to Halifax, Nova Scotia. She also made long summer practice cruises which took her as far as ports of England and Portugal. Her name was stricken from the Navy list on 6 August and she was sold on 1 Oct 1909.

Enterprise was also the name given to a 66-foot motor patrol craft purchased by the Navy on 6 Dec 1916. She, the sixth ship to bear this name, was placed in the service of the Second Naval District in 1917 and performed harbor duties at Newport, R.I., and New Bedford, Mass., during World War I.

THE SEVENTH *Enterprise* (CV 6) was a marked contrast to her predecessors. Her over-all length was 827 feet, four inches, and she had a maximum breadth at her flight deck of 114 feet. She had a full-load displacement of 32,060 tons; her trial speed was 33.6 knots. When first commissioned, on 12 May 1938, she was manned by 82 officers and 1447 enlisted men, exclusive of her four-squadron air group. She was armed as of 1945 with eight 5-inch/.38 caliber guns in single mounts, six quadruple 40-mm antiaircraft mounts and eight twin 40-mm antiaircraft mounts. Her designed shaft horsepower was 120,000.

The "Big E" crowded a lifetime into her nearly four years of warfare. The enemy damaged her 15 times with hits and near misses. Tokyo claimed her "sunk" on six different occasions, but after each "sinking" she returned to battle.

Her final record was 911 Japanese planes shot down by the ship's guns and planes, 71 enemy ships sunk by her pilots, another 192 ships damaged or probably sunk, and vast damage done to enemy shore installations. While accumulating 20 battle stars, *Enterprise* recorded some 54,000 plane landings and traveled more than 275,000 miles — about the equivalent of 12 times around the world at the equator.

A storm at sea delayed *Enterprise* just long enough for her to miss the attack on Pearl Harbor.

The "Big E" was steaming through the central Pacific early in December 1941 when she ran into very heavy weather. She had been busy the previous months shuttling planes from the States to various island bases. To save her escorting destroyers from a terrific buffeting under the crashing waves, the flag, Fleet Admiral (then Vice Admiral) William F. Halsey, Jr., USN, ordered reduced speed.

As a result, *Enterprise's* ETA at Pearl Harbor was delayed — from 6 to 7 December — and *Enterprise* was thus saved.

AS SHE NEARED Pearl Harbor on the fateful December morning, her planes prepared to take off for the airfields around Pearl, according to plan. One flight left on what seemed a peaceful Sunday morning in the tropics, but when the planes reached Pearl they ran right into the middle of the Japanese attack. Their radio report was the first the carrier had that the nation was at war. Although it does not appear in official records, *Enterprise* men insist one of their scouts shot down the first enemy plane of the war that morning.

It remained for the raids on the Marshall and Gilbert Islands to account for the first official entry of enemy air loss on the *Enterprise* bulkhead.

Supported by a group of surface ships, including three heavy cruisers, in February 1942 the "Big E" drove deep into Japanese-held territory and, in the attack on the Marshall and Gilbert Islands, wrote the first page in a brilliant record that within 10 months was to earn her the Presidential Unit Citation.

With relatively small losses, *Enterprise,* in company with *Yorktown* and supporting men-of-war, hit hard at an enemy naval base and naval air base, sank some 73,000 tons of enemy ships, including two submarines (and not counting a light cruiser which was certainly out of the war for many months); blasted two airfields, and destroyed 36 Japanese aircraft. In so doing she successfully completed an experiment that was to develop into a new kind of war at sea — the task force built around the aircraft carrier.

IN EARLY JUNE, a strong Japanese thrust in the central Pacific, to occupy Midway Island, was met by a greatly outnumbered U. S. carrier force, consisting primarily of USS *Yorktown* (CV 10), *Hornet* (CV 8) and *Enterprise.*

After a heroic but unsuccessful attack by *Enterprise's* torpedo bombers, her dive bombers split into two groups. One group made three direct bomb hits on Admiral Nagumo's flagship, the carrier *Akagi,* with most of her planes on deck. Huge explosions set *Akagi* afire from stem to stern. By nightfall, the ship had to be abandoned and was sunk by a Japanese torpedo.

The second *Enterprise* group made four direct hits on carrier *Kaga,* and she also became a great mass of flames. She sank that same evening in a terrific explosion. Carrier *Soryu,* with one flight of planes on deck for launching, was crippled by *Yorktown* and later sunk by the submarine USS *Nautilus* (SS 168).

Later, 18 dive bombers which had been launched from *Hiryu,* followed by torpedo planes, attacked *Yorktown.* Most were shot down, but five broke through to score three bomb hits and two torpedo hits. *Yorktown* had to be abandoned and, three days later, capsized and sank.

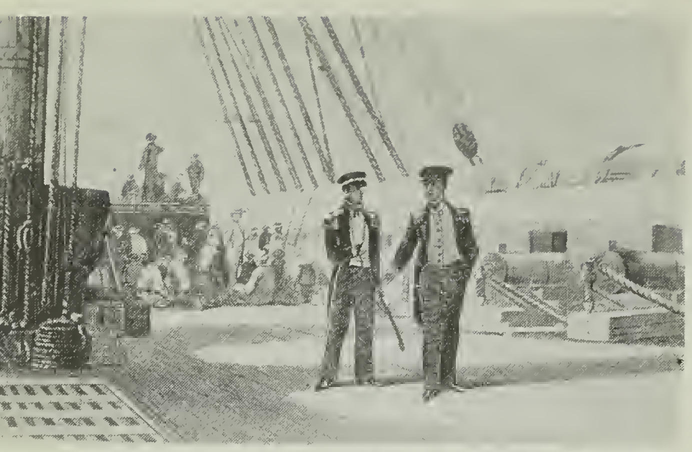
By the end of the battle on 6 June, Japanese losses had put an end to their offensive, and had turned the tide of the Pacific war.

BIGGEST 'E'—Nuclear-powered carrier *USS Enterprise* (CVAN 65) heads to sea out of Newport News, Va.

SIX MONTHS LATER, in the United States' first important offensive action of the war, Marines landed at Guadalcanal and Tulagi. Air cover was provided by *Enterprise* planes. Enemy positions were wiped out as her squadrons covered Marine landings, dropping 56,000 pounds of bombs. In one day, 13 enemy planes were shot down.

In October 1942, as part of the task force bent on blocking the Japanese fleet still intent on rooting the Marines out of Guadalcanal, search planes of *Enterprise* made contact with the enemy north of the Santa

NUMBER FIVE — *Enterprise* launched in 1874 was a steam corvette, but still had auxiliary sail power.



LONG AGO — Navy life when *Enterprise* carried sails was quite a contrast to duty in CVAN 65.

Cruz Islands, where there were two enemy forces: One composed of two battleships, a heavy cruiser and seven destroyers; the other, two carriers. In the ensuing battle her planes scored hits on a carrier and a battleship, and shot down 33 enemy planes while her antiaircraft batteries were accounting for another 30. Violent maneuvering spared her several torpedo hits from attacking planes, but she sustained two damaging bomb hits. It was in this battle that USS *Hornet* (CV 8) suffered such severe damage it was necessary to abandon and sink her.

In port for a hasty patch job, *Enterprise* was on her way again in two weeks, in time to repel another major Japanese attempt to retake Guadalcanal. Seabees were still on board, repairing the damage she suffered at Santa Cruz. On 13 November, one of her flights sighted a Japanese battleship with cruiser and destroyer escorts steaming into position to bombard Henderson Field, verifying an earlier report brought in by a PBY. After her torpedo bombers sent their torpedoes into the battleship, leaving it listing badly, the "Big E" concentrated for the next two days on the enemy's cruisers, destroyers and invasion transports.

IT WAS DIFFERENT in 1943. After having stood a long vigil as the only U.S. carrier in the South Pacific, *Enterprise* was joined by USS *Saratoga* (CV 3) and later the British carrier HMS *Victorious*. So it was decided that the "Big E" could be spared from the front line long enough to return for a much-needed overhaul.

It was again *Enterprise* which inaugurated a new type of carrier warfare — night fighting during the invasion of the Gilbert Islands in November 1943.

HOT SPOT — Crew members of CV 6 fight fire after kamikaze attack during battle of Okinawa.

When *Enterprise* was operating off Tarawa, enemy torpedo bombers were detected approaching the carriers. A trial "Bat Team," composed of one radar-equipped torpedo plane and two fighters, destroyed two and possibly three Japanese planes and the rest were driven off without inflicting any damage to the force.

From that time on *Enterprise* was the pioneer in the development of the art of night combat. At one stage, *Enterprise* had planes in the air day and night for 174 consecutive hours, or more than one full week.

It was her night-fighting torpedo planes that sparked the success of the first carrier strike on Truk in February 1944. During the battle of the Philippine Sea, it was *Enterprise* planes that finally located the enemy fleet when it appeared to have gotten away free. With Air Group 20 on board, she attacked all three of the widely scattered enemy forces used in the Battle of Leyte Gulf.

THE "BIG E'S" career after she joined Admiral Halsey's Third Fleet in the fall of 1944 was highlighted by her work in the Leyte Gulf battle. She damaged two battleships and a heavy cruiser, and attacked a new Japanese battleship which later sank, becoming the first modern battleship with advanced AA defense to go down under plane attack alone.

Enterprise climaxed her night combat flying record during the first five months of 1945, when her planes flew more than 1000 target sorties from her deck. In these operations she covered the invasion of Luzon, struck against the enemy forces and installations in French Indochina, Hong Kong, China, Taiwan (Formosa) and Okinawa; made two carrier strikes against Tokyo and the Inland Sea; supplied air support for the Iwo Jima landings in February and March; and initiated the softening-up bombardment and air support for the Okinawa landings in April and May.

In the last year of the war, Night Air Group 90 proved how much damage night-flying carrier planes can inflict by using the pinpoint bombing technique of carrier pilots.

On 14 May 1945, while operating as flagship of Task Force 58, with Vice Admiral Marc A. Mitscher, USN, on board, she was standing by, some distance off Okinawa, waiting for her planes to return from forays over the island—where they were giving air cover to landing operations. A *Hellcat* pilot brought his plane in, climbed wearily out and reported that he had knocked down an enemy plane nearby. *Enterprise* gunners splashed attackers coming in on the carrier soon afterwards.

A SHARP-EYED LOOKOUT spotted another enemy plane maneuvering in the cloud cover over the flattop. It cleverly evaded the task force fighters and, ducking through the heavy curtain of flak, came screaming down on the "Big E." When it looked as though the pilot was going to overshoot his mark, he flipped his plane over on its back and crashed into the forward part of the flight deck. His bomb exploded directly under the forward elevator, sending it (according to some possibly exaggerated reports by eyewitnesses) 400 feet in the air and putting a big bulge in the flight deck.

Immediately, fire roared through the forward part of the ship. Fortunately the blaze was localized, because the ship had been buttoned up before the suicide plane struck. Officers and men pushed through the smoke and flames to pour tons of water into the burning area. Gun crews tossed ammunition overboard until it got too hot to handle, and then broke out fire hoses and poured a steady stream of water into the magazine to keep explosions to a minimum. Within 17 minutes after the ship was hit the fire was under control, and within half an hour it was completely extinguished. Nevertheless, she suffered 14 men killed and 34 wounded.

Between September 1945 and January 1946, she made several "Magic Carpet" trips in the Pacific and, later, in the Atlantic. She was decommissioned on 17 Feb 1947 and stricken from the Navy List on 2 Oct 1956.

During her nine years of active duty she had earned a PUC, an NUC and 20 battle stars.

IN SEPTEMBER 1960 what has been called "the most exciting ship on the future horizon of the Navy" was christened. She's the gigantic, nuclear-powered attack aircraft carrier USS *Enterprise* (CVAN 65). Her keel was laid in February 1958.

When Enterprise moved out of her dry dock at Newport News and moored alongside a wet dock nearby, she was still a long way from ready to join the Fleet. Still ahead were many months of fitting out before the commissioning of the ship destined to give the "super" in the super-carrier designation of the flattops a new meaning.

Enterprise successfully completed the initial phase of her sea trials last October. Her commissioning in November 1961 heralded the approach of a long-awaited naval milestone — the blending of the striking power embodied in modern jet aircraft and missiles with the well-nigh unlimited cruising range and staying power provided by nuclear propulsion.

In her sea trials, the new carrier, designed to operate at 35-knot-plus speeds, developed her full power and demonstrated an ability to go from all engines ahead full speed to all engines back emergency full speed.

Eight pressurized-water nuclear power plants enable *Enterprise* to operate for extended periods without refueling. (It has been said that with one loading of her nuclear plants the ship could cruise around the world 22 times). In combination, her eight reactors constitute the largest U. S. nuclear installation ashore or afloat. Her propulsion system has a rating of 200,000 horsepower.

THE EIGHTH *Enterprise* is the second Navy surface ship to be powered by nuclear reactors. The guided missile cruiser USS *Long Beach* (CGN 9), placed in commission last September, was the first to become operational. The missile frigate *Bainbridge* (DLGN 25) is scheduled for sea this year, and still another nuclear frigate has been authorized for construction.

Enterprise is the world's largest ship. She is 1101 feet long, 252 feet across the flight deck, and displaces 85,000 tons.

A few of the more tangible assets nuclear propulsion will provide in *Enterprise* include the following:

Logistic support requirements will be sharply reduced; her aviation fuel capacity will be hundreds of thousands of gallons greater than that of conventional carriers, which must utilize vital tank space carrying bunker oil for their engines.

She will be capable of sustained high speed, making her much less vulnerable to submarine attack.

Since stacks aren't needed, it was possible to put better and more extensive electronic installations aboard her. In addition, it will be possible to close the ship more completely when under attack, thus reducing danger of atomic radiation to the crew.

Elimination of stack gases will greatly decrease air turbulence in the landing approach area. Such gases have created problems aboard conventional carriers when operating high-performance aircraft, and when the aircraft carrier is making its own wind over the flight deck.

Strategic and tactical flexibility will be vastly improved through her greater endurance and speed, and through her freedom from dependence upon frequent resupply.

Flexibility in acceleration and deceleration inherent in the nuclear power plant will provide an equal flexibility in shiphandling and maneuvering.

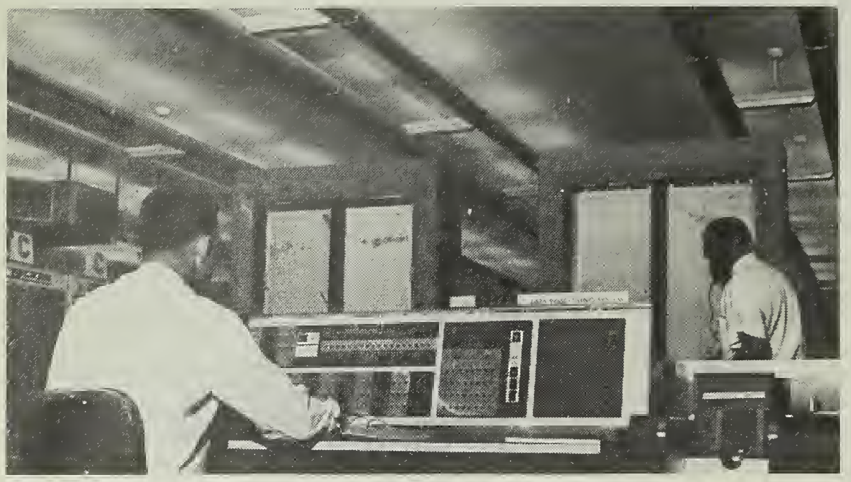
Enterprise will have the most powerful catapults, stronger arresting gear, strengthened decks and 700-plus feet of landing area to handle the newer, high-performance jets now operational, and those which will be developed in the future.

The modern carrier (nuclear or conventional) is a mobile floating base for aircraft flying well past the speed of sound — planes which measure their range in the many hundreds of miles and contain the very latest in all-weather navigation, communication and fire control equipment. These planes will be armed with both air-to-ground and air-to-air missiles, and will be able to choose between delivery of either conventional or nuclear-tipped weapons.

Add the facts we've already mentioned — that *Enterprise* will be able to move those aircraft to any distant trouble spot in the world at high speed, and keep them operating for much longer stretches without having to retire for replenishing and refueling, and you get some idea of the firepower such a ship is capable of delivering — more, it has been estimated, than that delivered by our entire Pacific Fleet during WW II.

BIG SPLASH — *USS Enterprise*, world's largest ship, is moved to outfitting pier after being launched.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



TECHNICIANS at Pacific Missile Range headquarters keep tabs on new computer during a simulated offshore missile tracking operation.

Shore-to-Ship Moon Relay

A shore-to-ship communication system which bounces messages off the moon has been operated successfully by the Naval Research Laboratory.

NRL scientists demonstrated the new moon-relay gear recently by transmitting a message from Stump Neck, Md., to USS *Oxford* (AGA 159), which was at sea.

The Stump Neck group used a 60-foot, dishpan-shaped antenna to transmit the message. *Oxford* had been fitted with a special receiver.

The shore-to-ship technique is similar to a shore-to-shore communication relay system which, for more than a year, has been sending messages, via the moon, between Washington, D. C., and Hawaii.

Scientists say the Communication Moon Relay System is more reliable than standard, long-range communication procedures. CMR is not affected by magnetic storms, sunspot cycles and other phenomena which often disrupt conventional long-range messages.

Now It's 22 Nuclear Subs

USS *Snook*, the Navy's 22nd nuclear-powered submarine, has been assigned to Submarine Flotilla One in San Diego. Commissioned late last year, *Snook* (SSN 592) is the flotilla's third SSN (*Scamp* and *Sculpin* are the others) and the Pacific Fleet's seventh.

A "fast attack" class submarine, *Snook* is 252 feet long. She is capable of diving to 400-foot depths and attaining speeds in excess of 20 knots while submerged.

YESTERDAY'S NAVY

On 1 Feb 1942 the carriers *Enterprise* and *Yorktown* attacked enemy positions in the Marshall and Gilbert Islands. On 6 Feb 1802 the United States declared war against Tripoli. On 6 Feb 1813 the British began their blockade of U. S. shipping in the Chesapeake and Delaware. On 7 and 19 Feb 1868 RADM C. H. Davis landed forces at Montevideo, Uruguay, to protect foreign residents during disturbances there. On 15 Feb 1898 *USS Maine* was blown up in the harbor at Havana. On 27 Feb 1942 *USS Langley*, the first carrier in the U. S. Navy, converted to a seaplane tender, was sunk by an enemy air attack.

Missile Range Computers

Two new computer installations at the Pacific Missile Range, Point Mugu, Calif., will give officials details of missile behavior five times faster than the older system did.

Duties for the new equipment include data reduction on tests of Navy missiles such as *Sparrow* and *Bullpup*, flight safety programming for ground-launched missiles, direct performance readout of inflight vehicles and establishment of a basic program for the Navy, navigational *Transit* satellites.

One of the new computers at Point Arguello, Calif., will be primarily programmed for flight safety and impact prediction of missile and space vehicles launched from the Naval Missile Facility and from nearby Vandenberg Air Force Base.

In a typical flight safety role, such as with the Army's *Nike-Zeus* at Point Mugu, the computer receives tracking data from several sources and determines missile heading and flight trajectory. This data is automatically compared with prelaunch information to determine whether the missile is performing as expected. The equipment can order the missile destroyed if its flight will endanger lives or property.

The orbit of the Navy's *Transit* satellite can also be determined by the new computer. In addition the computer will be used to familiarize *Transit* project personnel with other applications of the computer to the navigational satellite system. It can determine angles and orbital information of other space vehicles so that PMR ground tracking stations will know where and when to scan the skies for them.

The computer will also play a role in the Pacific Missile Range weather service. It receives data from the Navy Weather Facility at Monterey, Calif.. via a telephone line, each day at 0300. This coded weather data is reduced to usable form by the computer and turned over to weathermen for chart plotting and weather forcasting over the 500 mile-plus normal operating area of the Pacific Missile Range.

The new computer equipment contains 50,000 transistors and requires only two-thirds of the area needed for the old vacuum tube versions. Five times faster than the older model, the new one can read and write, electronically, 1.5 million bits of information per second. In 2.18 millionths of a second the new computer can locate and make ready for use any of 32,768 words of data (ten decimal digits each). In one second the computer can do 229,000 additions or subtractions; 39,500 multiplications; or 32,700 divisions.

Cone Catchers

In years past, the Navy had one responsibility — to maintain freedom of the seas. Today the Navy still has this job, but in addition, it participates in other programs on a "collateral duty" basis.

Navymen, Navy scientists, Navy ships and Navy planes, for example, continually work with the space exploration program of the United States. This country's first two astronauts to be shot into space were retrieved by the Navy.

But men are not the only means used to explore the vast area around the earth called space. Many instrument-filled satellites have been fired into orbit to return to earth with valuable information. These satellites often drop into the sea and must be picked up by ships.

The escort destroyer USS *Epperson* (DDE 719) recently rescued one of these objects, the nosecone of *Discoverer* satellite 29, from the Pacific. The satellite, which contained human bone marrow, dental tissues and a three-day old embryonic chick heart, had circled the globe 33 times.

Three Air Force men of a pararescue team were also picked up with the satellite. They had earlier jumped from a plane with rubber life rafts, and had kept watch over the cone until *Epperson* arrived. The nosecone was taken to Pearl Harbor, where it was returned to the National Aeronautics and Space Administration.

GREETINGS — *USS Epperson* (DDE 719) picks up *Discoverer* nosecone and USAF frogmen after landing.

Epperson was the second Pearl Harbor - based escort destroyer to take a satellite from the sea. USS *Radford* (DDE 446) had retrieved one previously.

Tinosa Launched

About 4300 tons of nuclear submarine slid bow-first into the briny at Portsmouth, N. H., last December. She was the 278-foot *Tinosa* (SSN 606).

Tinosa is a sister ship of USS *Thresher* (SSN 593) and, like her counterpart, will be among the fastest subs in the Navy, with deeper diving and quieter running capabilities than any other type of underwater craft.

Tinosa has an *Albacore* type hull, and carries the advanced sonar equipment which makes her class an effective antisubmarine weapon in the Navy's arsenal. Her main armament is the torpedo.

Present plans call for *Tinosa's* commissioning in mid-1962.

Robison Joins the Fleet

The 4500-ton guided missile destroyer USS *Robison* (DDG 12) has been commissioned at the Boston Naval Shipyard, Charleston, Mass.

When she arrived in Boston for the ceremony, *Robison* had already logged over 1000 miles. She had sailed from her birthplace at Bay City, Mich., to the East Coast, via the St. Lawrence Seaway. Like her Bay City sisters, USS *Lynde McCormick* (DDG 8) and *Henry B. Wilson* (DDG 7), *Robison* was launched sideways.

Robison will report to the Pacific Fleet Cruiser-Destroyer Force well-equipped to take care of herself and her companions. In addition to a main battery of *Tartar* surface-to-air guided missiles, *Robison* is armed with *Asroc*, torpedos, and two 5-inch/.54 caliber rapid-fire guns.

NAVYMEN salute as flag is raised and commissioning pennant broken on *USS Cheboygan County.*

The new DDG is named for Admiral Samuel S. Robison, USN. During his 43-year Navy career, Admiral Robison, in addition to making many technical contributions to the Navy, held such posts as Commander in Chief, U. S. Fleet; Superintendent of the U. S. Naval Academy; Commandant of the 13th Naval District; and Commandant, Boston Navy Yard. He won the Navy Cross for his submarine service during WW I.

SPECIAL DELIVERY — Satellite's nosecone is brought to Pearl Harbor to be turned over to National Aeronautics and Space Administration after the pick-up.

DESTROYER Navymen of DesRon 92 receive instruction in Japanese language before shifting home port from Long Beach to Yokosuka.

Nihongo Wo Benkyu Shimasu

The men of DESDIV 92 have been boning up on the Japanese language in preparation for a homeport shift from Long Beach, Calif., to Yokosuka, Japan, early this year. Their answer to a little red schoolhouse is a quonset hut near the Long Beach destroyer piers.

The ships involved are USS *Lyman K. Swenson* (DD 729), *Collett* (DD 730), *Blue* (DD 744) and *Shelton* (DD 790).

Two-hour classes are held each evening, Monday through Thursday. Pronunciation and conversational patterns of Japanese are being stressed, but films and other visual aids provide the students with an understanding of the Japanese people and their culture.

Teachers are four men and women of the Long Beach area, headed by Tomio T. Sugano, a language instructor at Long Beach City College.

For those who don't know the language, the title may be roughly translated as "Study Japanese Diligently."

Hubbard to the Rescue

A seaman who fell overboard when his ship took a steep roll in high seas credits his lifejacket and USS *Harry E. Hubbard* (DD 748) with saving his life.

Seaman Douglas A. Wirch went overboard when his ship, USS *Coral Sea* (CVA 43) rolled while maneuvering during a Pacific Fleet training exercise. His lifejacket kept him afloat until *Hubbard* pulled him on board a few minutes later.

The DD provided Wirch with a hot shower and dry clothes, then transferred him back to the carrier.

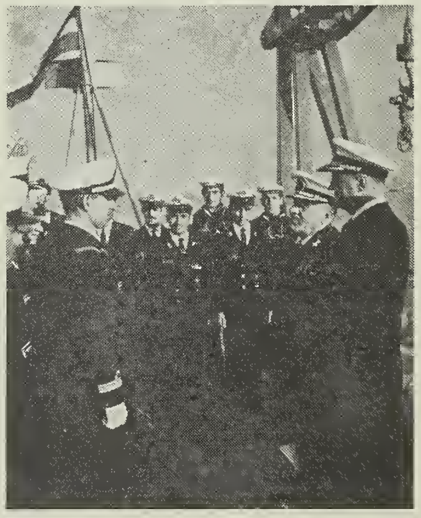
Iranian Naval Visit

A 19-gun salute rattled windows at the Long Beach Naval Base and a Marine honor guard snapped to attention as Vice Admiral Farajollah Rassai, the Commander of the Imperial Iranian Navy came aboard.

Admiral Rassai, who is the Iranian counterpart of the United States Navy's CNO, spent two days in the Los Angeles area as part of his two-week tour of the United States, during which he familiarized himself with United States naval activities.

The Admiral's visit at Los Angeles coincided with the arrival of the wooden-hulled, 320-ton minesweeper *Simorgh* which is one of three *Bluebird* class sweepers the United States has turned over to Iran since 1958.

Simorgh arrived from Seattle where she had recently been presented to the Iranian government. She underwent minesweeping, gunnery and damage control training with the Pacific Fleet before departing San Diego for a 90-day voyage to Iran.



REUNION — VADM Farajollah Rassai of Iran and RADM K. L. Veth, USN, inspect Iranian minesweeper which visited USNS, Long Beach, Calif., at same time.

Marjorie Sterrett Awards

Fourteen Navy ships, one from each major type command, have been awarded the Marjorie Sterrett Battleship Fund Award for fiscal year 1961. The Pacific Fleet destroyer USS *Somers* (DD 947) received the award for the second consecutive year.

Last fiscal year (1960) only four ships – one Service Force ship and one DD from each Fleet – received this award. Before that, just one ship in the Navy received the award.

For fiscal year 1961, however, one outstanding ship in each type command was selected. The selected ships stand first in over-all performance in each command.

Winners for fiscal year 1961 in the Atlantic Fleet are:

USS *Forrestal* (CVA 59), Navy Air Force; USS *Little Rock* (CLG 4), Cruiser Force; USS *Wallace L. Lind* (DD 703), Destroyer Force; USS *Ability* (MSO 519), Mine Force; USS *Grant County* (LST 1174), Amphibious Force; USS *Vulcan* (AR 5), Service Force; and USS *Proteus* (AS 19), Submarine Force.

Pacific Fleet winners for fiscal year 1961 are:

USS *Ticonderoga* (CVA 14), Navy Air Force; USS *Providence* (CLG 6) and USS *Somers* (DD 947), Cruiser-Destroyer Force; USS *Whippoorwill* (MSC 207), Mine Force; USS *Mathews* (AKA 96), Amphibious Force USS *Lipan* (ATF 85), Service Force and USS *Diodon* (SS 349), Submarine Force.

The Marjorie Sterrett Battleship Fund was prompted by a letter sent to the editor of the *New York Trib-*

une on 2 Feb 1916 by a 13-year-old girl named Marjorie Sterrett, of Brooklyn, N. Y. Enclosed was her full week's allowance of a dime. She asked that the money be used to help build a battleship.

Spurred by her gift, the *Tribune* association established a trust fund in her name in 1917. Each year money and a plaque are given to ships considered by the commanders-in-chief of the Atlantic and Pacific Fleets to be first in over-all performance. The money must go into the ships' welfare and recreation funds, and can only be used to benefit the crew members.

Thetis Bay in Atlantic

USS *Thetis Bay* (LPH 6), first of the Navy's amphibious assault ships, has shifted to the Atlantic Fleet Amphibious Force after five years of seaborne heliporting with the Pacific Fleet. Taking over her vacated spot in the Pacific is the recently converted *Valley Forge* (LPH 8), formerly CVS 45.

First commissioned in 1944 as a World War II-type jeep carrier, *Thetis Bay* was renovated and recommissioned from the Reserve Fleet in the mid-1950s, when then-new concepts in amphibious warfare (vertical envelopment) imposed a requirement upon the Navy to develop a ship which could serve as part heliport, part transport and part command ship.

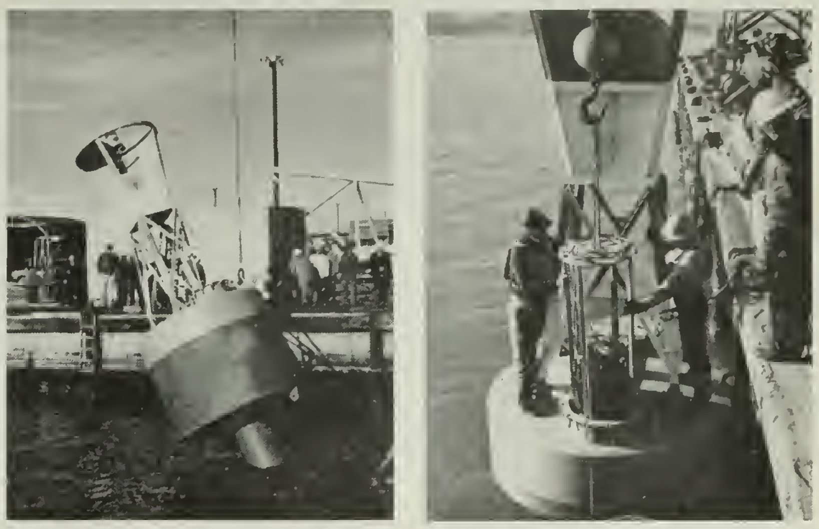
In the years since 1944, the 10,000-ton *Thetis Bay* has logged almost 200,000 miles of Pacific travel. Since her rebirth as an amphibious assault ship, she's racked up more than 26,000 accident-free landings—a record for rotary-winged aircraft operations aboard a carrier.

Isbell Trophy for VS-38

Safety, like virtue, is its own reward. Aside from the obvious benefits reaped by naval aviators who play it safe, VS 38 squadron of Carrier Antisubmarine Air Group Fifty Nine was awarded the Arnold Jay Isbell trophy for safety.

Air Antisubmarine Squadron 38 logged 3500 flight hours and 1000 carrier landings without accident since its last deployment in May 1961.

VS-38 is embarked aboard USS *Bennington* (CVS 20). It consists of 31 officers and 158 enlisted men and is homeported at San Diego, Calif.



NUCLEAR-POWERED buoy is launched. *Rt:* Battery unit is installed.

Coast Guard Installs Nuclear Buoy

A nuclear-powered navigation buoy has been launched in Curtis Bay, Md., by the U. S. Coast Guard. Success of this prototype could revolutionize the present system of tending remote lights and beacons.

Electricity for the flashing light in the seven-ton, 26-foot-high buoy comes from a small nuclear-powered generator. The buoy can operate for 10 years or more without refueling.

The generator is called SNAP-7A and is the latest in a series of "Systems for Nuclear Auxiliary Power" under development by the Atomic Energy Commission. It is the first of its type to operate under water.

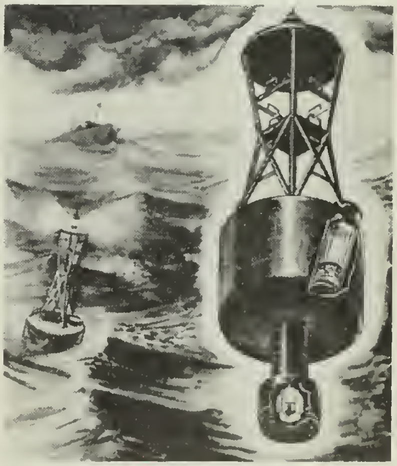
After a preliminary test in Curtis Bay, the buoy will be transferred to a point in the Chesapeake Bay, opposite the mouth of the Potomac River, for about six months. There, its performance will be checked regularly by the Coast Guard. The adjustable light blinks on every five seconds, and in clear weather can be seen for several miles.

Heart of the atomic generator is a four-sided fuel block loaded with Strontium-90 in the form of insoluble ceramic pellets. As the radioactive material decays inside the block it generates heat, which is converted directly into electrical energy by 60 pairs of thermoelectric elements.

The generator is rugged enough to survive an accidental ram without releasing its fuel.

Once the buoy is in place, the radiation it emits into the air during operation is less than that normally present in the atmosphere as a result of cosmic rays. The surrounding water is kept free from radioactivity.

Even with its thick shielding, SNAP-7A weighs only about a ton. This is about 500 pounds less than the lead-acid batteries normally used in the navigation buoy. A more important feature, however, is that the generator should require only two routine maintenance checks during its 10-year life. Batteries are normally replaced in a buoy of this type at least once a year, and the operation is difficult and costly.



DRAWING of first nuclear-powered navigation buoy shows the battery unit and the generator.

UNOFFICIAL drum and bugle corps of the Pacific Fleet's *USS Delta* is believed to be the only one representing a Navy ship. (see p. 27).

Recommissioned Ships

Out of mothballs, and into active service as a boost to U. S. defense measures, are a variety of amphibious and service ships, some of which have already gone to work. These include:

- USS *Mazama* (AE 9)—From the mothball fleet at Orange, Tex., *Mazama* was towed to Pennsylvania last summer for a three-month overhaul and recommissioning at Philadelphia. She now operates with Service Squadron Two of Service Force, Atlantic, and is homeported at Mayport, Fla.

Mazama was built in Tampa, Fla., and first commissioned in March 1944. (She was named after Mount Mazama, a former volcano which is now the site of Crater Lake, Ore.) *Mazama* participated in operations off Saipan and Japan during the closing stages of World War II. She was decommissioned in 1947, but was reactivated in 1955 for service in the Atlantic. She was again deactivated in 1958.

- USS *Mauna Loa* (AE 8) – Also taken from mothballs at Orange, *Mauna Loa* was towed to Chester, Pa., last summer for overhaul, and was recommissioned at Philadelphia.

Mauna Loa is named after a volcano on the island of Hawaii. She was constructed in Tampa and commissioned in 1943. The ship served with the Pacific Fleet during WW II, was deactivated in 1946, but was reactivated in 1955 and served with Service Squadrons Two and Four and the Sixth Fleet. She was last deactivated in 1958.

- USS *Ashland* (LSD 1) – *Ashland* has joined the Atlantic Fleet Amphibious Force. She was recommissioned at Little Creek, Va.

At the time of her commissioning in 1943, *Ashland* represented the largest type of ship ever constructed for amphibious warfare (458 feet in length, 7900 tons) .Her name commemorates the Kentucky home of Henry Clay.

During WW II *Ashland* participated in amphibious operations in the Gilbert, Marshall and Mariana islands, and at Leyte, Luzon and Iwo Jima. She was decommissioned and placed in the Pacific Reserve Fleet in 1946, but was reactivated four years later for service with the Amphibious Force, Atlantic. *Ashland* was mothballed in the Norfolk Group of the Atlantic Reserve Fleet in 1957. She carries approximately 265 officers and enlisted men.

- USS *Earle B. Hall* (APD 107) – *Hall* was also recommissioned at Little Creek last fall, and, like *Ashland*, now serves with PHIBLANT. *Hall* was originally constructed as an escort vessel (DE 597). She was first commissioned in May 1945. Her name was selected in honor of a Dawson Springs, Ky., Navyman (Earle B. Hall, AD2) who was killed in action in the Philippines, in December 1941.

In 1946 *Hall* was decommissioned, but she was reactivated in December 1950 for service with PHIBLANT. The ship was last mothballed in 1957.

- USS *Ruchamkin* (APD 89) – Another onetime escort vessel (DE 228), *Ruchamkin* was called up last fall and reactivated in Boston.

Like *Hall*, the modified DE is designed for transporting UDT and reconnaissance personnel to amphibious operations areas, and can be used as a primary control vessel during amphibious assaults.

Newest Guided Missile DD

The guided missile destroyer USS *Goldsborough* (DDG 20), due for commissioning late this year, has been launched at Seattle, Wash.

The DDG will be armed with *Tartar* surface-to-air missiles and an *Asroc* launcher, in addition to 5-inch guns, torpedo launchers and depth-charge equipment. She will be 431 feet in length, measure 47 feet across the beam, and, when fully loaded, displace 4500 tons.

Four boilers, which feed 70,000 horsepower to twin screws, will give *Goldsborough* speeds in excess of 30 knots.

The ship is named for RADM Louis M. Goldsborough, who served in the Navy for 61 years (1812-1873).

Flight Safety Record

Formation Flight Unit 2 of VT-3, NAAS Whiting Field, Milton, Fla., claims a safety record for the training command with a total of 65,000 accident-free hours since March 1958. Eight of the formation's 25 instructors have flown more than 1000 accident-free hours.

The secret of success, according to the unit leader, is to train each student as though he were a safety officer. The unit aims to turn out safe, as well as proficient, aviators.

DLG Carries *Terriers* and *Asroc*

A new guided missile frigate, the 7000-ton *Harry E. Yarnell* (DLG 17), is scheduled to join the Fleet's operating forces early next year. The ship, launched recently at Bath, Maine, is 533 feet in length and measures 53 feet at the beam.

When ready for service, *Yarnell* will be armed with *Terrier* missiles and *Asroc* antisubmarine rockets. Three-inch guns and torpedo tubes will back up the ship's missile batteries. She will also be equipped with a helicopter landing platform.

Yarnell is the first ship to be named in honor of the late Admiral Harry E. Yarnell, commander of the Asiatic Fleet from 1936 to 1939, and a Special Advisor in the offices of SecNav and CNO during WW II.

PAINTERS — Crewmen *(left and right)* of *USS Sproston* dress up two of her awards for fiscal year 1961.

This Ship Is E-OK

THE ESCORT DESTROYER USS *Sproston* (DDE 577) almost ran out of paint recently. Not gray; but black, white and green. The crew was decorating the ship with "Es," "As" and "Cs."

The most significant "decoration" was the Commander Cruiser-Destroyer Force, Pacific Fleet, Battle Efficiency "E" for fiscal year 1961.

Besides this "E," the antisubmarine "A" and four gunnery "Es" – one each on mounts 31 and 32, and on directors, Mark 37 and 50, were added. A bit of color was included when the green "C" and "E" were added for accomplishments in communications and operations.

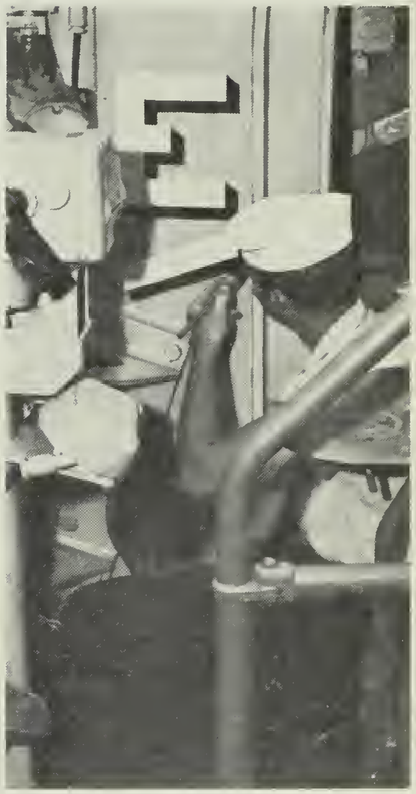
Sproston has also been awarded the Destroyer Squadron 25 "best in squadron" plaques for operations and gunnery.

Hard work is not new for *Sproston.* She joined in the action of World War II within months after she was commissioned on 19 May 1943. *Sproston* downed her first enemy plane on 25 Oct 1944, and by 4 Jun 1945 she had "killed" six additional planes and helped to splash three others.

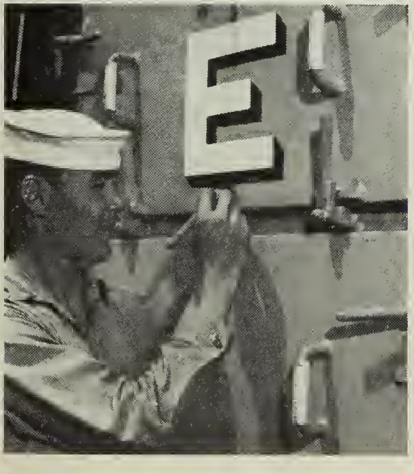
Her first submarine kill came toward the end of the war while en route back to the United States. *Sproston* came across a battle between USS *Antares* (AK 258) and two Japanese submarines and immediately joined in the fight.

She sowed a pattern of depth charges which forced one of the subs to the surface. *Sproston's* main battery soon destroyed that Japanese underseas craft.

Sproston was decommissioned in 1947, but when the action began in Korea, she was again called to active duty. She performed well in the Korean campaign and, if her awards are any indication, she's still doing a great job for the Navy.



AWARDS are painted on Mark 56 director, Weapon *Alfa* launcher, Mark 37 director and Mount 31.



SERVICESCOPE

Brief news items about other branches of the armed services.

AN ENGINE INVENTED 150 years ago may be used by the U. S. Air Force in future space vehicles.

Scientists of the Air Force Systems Command are converting the century-and-a-half old Stirling cycle engine for use as a solar energy power source. Combined with a solar energy collection unit, the lightweight engine will provide electrical power to operate space vehicle equipment.

A $647,700 contract has been awarded to redesign and produce one complete lightweight package for use in space vehicles. During tests, the power unit will be run continuously for 1500 hours and is expected to produce three kilowatts of power – enough to power 30 100-watt light bulbs. The 1961 Stirling model will be lighter and more effective than its ancient grandfather.

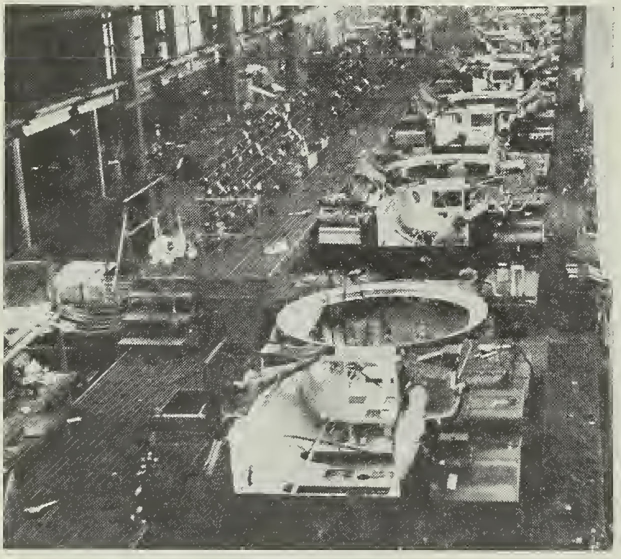
Here's how the solar power system should work: A chemical, lithium hydride, will be used to store energy as the system orbits the sun. This energy will be fed back to the engine when it enters the earth's shadow, where the sun would not be available as a power source.

★ ★ ★

A NEW "DO-IT-YOURSELF" condensation kit capable of converting ocean water into drinking water has been developed by the U. S. Army. It may keep future survivors of sea disasters from dying of thirst.

Called the "sit still," the gadget is a product of the Army Engineer Research and Development Command, Fort Belvoir, Va. Several kits can provide a floating shipwreck victim with as much as a pint of water in 16 hours – enough to keep him alive.

The kit is made up of a sheaf of five sheets, all about the size of standard typewriter paper. They are: A black plastic film (on top); a piece of paper toweling or cloth; a water repellent screen; a sheet of aluminum foil, and a cloth backing for the foil. A sponge to collect the water completes the outfit.



THE LINEUP—Army's 50-ton main battle tanks roll off production line at Detroit, Mich., Tank Arsenal.

RADAR antennas towering 16 stories high are being operated by the USAF at Thule, Greenland.

Here's how the gimmick works. The five sheets are dipped in the ocean, excess water drained off, and the aluminum foil wiped dry.

Reassembled with the plastic film on top, the sheaf is then exposed to the heat of the sun, or if it happens to be a cloudy day or night, to the heat of the survivor's body. In other words, he sits on it .

Either way, heat penetrates to the aluminum foil, which is then cooled by the bottom, salt water-soaked cloth. In the cooling process, a condensation of fresh water forms on the foil. The sponge is used to soak up those drops of fresh water. Use of additional sheets of toweling, screen and foil will increase the yield.

★ ★ ★

A COMPUTER-TRANSMITTER SYSTEM which calculates aerial battle commands, then instructs fighter pilots to perform interceptions, has been successfully tested by the Air Force Systems Command at Hanscom Field, Mass. The new electronic brain, known as Time Division Data Link (TDDL, or "Tiddle" for easy pronunciation) makes it possible for one machine to relay instructions to hundreds of aircraft..

When an aerial target is detected, command instructions are fed into Tiddle via a computer. It then distributes the command to transmitters throughout the country, which, in turn, beam the message to aircraft.

Equipment aboard the planes reconverts the Tiddle code and displays it on the pilot's instrument panel. Thus, each pilot receives whatever information is necessary to accomplish the intercept.

Or, the Tiddle machine can pass its info directly to an automatic pilot in the aircraft. In this way, the intercept is completely automatic, except for the actual gun or rocket firing, which the pilot must do all by himself.

★ ★ ★

A GROUP OF ARMY transportation and communications specialists are slowly pushing through 150 miles of Panama jungle on a 60-day expedition designed to evaluate motor vehicles and communications techniques.

Equipment being tested includes the M-1 1000-gallon Rolling Liquid Transporter; the H-133 Armored Personnel Carrier; the T-116 Tracked Amphibious

Cargo Carrier, and several standard trucks. Homing devices and signal flares are also being evaluated.

The expedition is comprised chiefly of men from the U. S. Army Transportation Board, Fort Eustis, Va. Specialist teams from the Ordnance, Signal, Quartermaster, Chemical, Medical and Engineer Corps, and representatives of the Infantry Board, are making the trek as observers and technicians.

The men are relying largely on their own resources, although some supplies are being provided through air drops.

★ ★ ★

A NEW ARMY-AIR FORCE command designed to increase the flexibility, readiness and combat effectiveness of the forces assigned has been formed at MacDill Air Force Base, Tampa, Fla.

Known officially as the United States Strike Command, it is made up of elements of the Strategic Army Corps and the Tactical Air Command.

Although MacDill had been selected for inactivation, it was chosen as the initial and temporary site for Strike Command Headquarters because there are sufficient facilities available there to allow a small headquarters to begin work without delay.

The new command will provide combat-ready land and tactical air forces which can be rapidly moved when required to augment U. S. forces already deployed or to carry out such other contingency missions as may be assigned by the Secretary of Defense or the Joint Chiefs of Staff.

★ ★ ★

THE ARMY SIGNAL CORPS now has an air-transportable air defense system (it's moved around by helicopter) which can help battle commanders coordinate the fire of *Nike* and *Hawk* air defense missile batteries. The system consists of five or more plastic and aluminum shelters that are moved from one military position to another in any would-be battle area, including the roughest mountains and jungles. It's ready for action minutes after a helicopter sets it down.

One of the units is an operations central which broadcasts target information. The others are coder-decoder units which act as network pickup stations.

'AGGRESSORS' en route to Army maneuvers on San Juan Islands board *USS Polk County* (LST 1084).

COAST GUARD icebreaker *Westwind* (WAGB 281) steams near island of ice during Arctic operations.

With the mobile air defense system, commanders can monitor enemy aircraft and assign targets (by digital message) to various widely separated missile batteries. Coder-decoders at the missile sites transmit the status of each battery to operations central. *Helilift* also contains an auxiliary four-wire voice communications network.

★ ★ ★

A NEW ANTI-MALARIA PILL developed by the Army Medical Service and successfully field tested in Korea is now available to the armed forces as a standard item.

The pill contains a combination of chloroquine and primaquine. Formerly, chloroquine was administered in weekly dosages to patients in malarious areas, followed by a dosage of primaquine for 14 consecutive days during the return trip to the United States from the Far East. The new pill is taken only once a week while in the malarious area.

Under the old system, with increased use of air transportation, it would have been necessary to arrange medical surveillance of patients for two weeks after returning to the United States, or detain personnel either in Korea or the United States for two weeks' medical surveillance during treatment.

Besides being a time saver, the new tablet also tastes better. The new tablet has a coating which disguises its bitter taste. This has been an objectionable feature of both the old chloroquine tablet and the early chloroquine-primaquine tablets.

★ ★ ★

THE ARMY HAS RELAXED its vision standards. As a result, severe color blindness is no longer a bar to peacetime service.

In the future, men who are severely color blind (unable to distinguish bright red from bright green) will be assigned clerical jobs or work that does not require acute color perception.

Approximately one per cent of the men examined for Army duty are severely color blind, reports the Army Surgeon General's office.

THE WORD

Frank, Authentic Information On Policy — Straight From Headquarters

• MEDALS — Somebody, BuPers says, isn't as bemedaled as he should be. The Bureau still has on hand a considerable stock of National Defense and Korean Service Medals, which it ordered in sufficient quantities to meet the demand of those who merited these medals.

The missing, the Bureau thinks, may be among the ranks of involuntarily recalled Reservists, inactive Reservists and discharged veterans. They might also be among the ranks of Regular Navymen.

Whoever they may be, the Bureau suggests a considerable number of those eligible may be out of uniform when medals are to be worn. It also suggests commanding officers comb their records and remind eligible Navymen of their eligibility.

• AREAS FOR FOREIGN CARS — Owners of foreign-made automobiles purchased overseas since 6 Mar 1961 now have 15 areas to which their cars may be shipped at government expense. Czechoslovakia and Ethiopia have been added to the 13 original areas.

Alnav 43, which announced the original list of countries, has also been clarified. Ireland, one of the areas originally designated as an area to which foreign cars may be shipped, includes Northern Ireland.

The 13 areas already announced as having inadequate maintenance facilities for American-made automobiles are Bermuda (within limitations of Bermuda law), Indonesia, Hungary, Cyprus, Republic of the Congo, Eritrea, Bulgaria, Yugoslavia, Afghanistan, Malta, Poland, Ireland (including Northern Ireland) and areas around Holy Loch, Scotland (Argyll County and Gourock-Greenock Township).

• ALL-NAVY CARTOON CONTEST — With fanfare and a couple of hear ye's, announcement is made of the seventh All-Navy Cartoon Contest.

The rules this year are similar to those of former years. The contest is open to all active duty Navy personnel AND their dependents.

Anybody falling into these categories who feels capable of drawing a chuckle-producing gag or situation cartoon with a Navy background should submit his entry on eight by ten and a half inch white paper or illustration board. In order to be acceptable, the cartoon must have a Navy theme or background, must be in good taste.

All cartoons entered must have the following information securely attached to the back:

Full name of the originator; rate/grade; serial/file number; duty station; home town and home town newspaper; command recreation fund administrator; and a brief statement certifying the cartoon to be original.

In addition, the following statement must be attached to the cartoon:

"All claims to the attached entry are waived and I understand the Department of the Navy may use as desired."

The statement is then signed by the contestant and forwarded via the contestant's commanding officer or his representative.

If the contestant is a dependent of a Navyman, the cartoon must bear this certification:

"I am a dependent of.......... rate/grade; serial/file number."

All entries will become the property of the Navy Department and will not be returned. They must be in the hands of the Chief of Naval Personnel (Attn: Pers-G11 by 1 Jun 1962.

The five cartoons that produce the biggest yuks from the judges will be awarded All-Navy championship trophies furnished by the Chief of Naval Personnel. The trophies will be forwarded to the winners via their commanding officers.

All winning cartoons will be published in ALL HANDS Magazine and suitable mention will be made in the Special Services Newsletter.

• PENNSYLVANIA BONUS—The eligibility requirements for cash bonus payments to Pennsylvanians who served on active duty during the Korean conflict have been amended. As a result, as much as $500 may now be paid to Navymen who were ineligible for the bonus under the old law. Here's how it looks now:

You must have been a resident of Pennsylvania at the time you entered the service.

If you served on active duty (in any of the armed forces) for more than 60 days between 25 Jun 1950 and 27 Jan 1954, and were discharged under honorable conditions, you may receive $10 for each month of service.

If you hold the Korean Service Medal as a result of service in the Korean war zone you may receive $15 for each month of service.

But, if you served on continuous

DON'T HOLD UP ship's work. Pass this issue of ALL HANDS Magazine along to nine other shipmates.

Fred Korth Succeeds Connally as SecNav

The new man at the helm is Fred Korth, who succeeded John B. Connally, Jr., after he resigned as Secretary of the Navy.

Mr. Korth is 52 years old and has been a banker in Fort Worth, Texas. A lawyer, he graduated from the University of Texas in 1932 and completed his law studies at George Washington University, Washington, D. C.

An Army Officer during World War II, he served with the Air Transport Command, which he left as a lieutenant colonel.

In 1951, Secretary of the Army Frank Pace, Jr., invited Mr. Korth to lend a hand for a couple of weeks. Mr. Korth accepted the invitation, but the weeks lengthened into years, during which time Mr. Korth served as Assistant Secretary of the Army.

active duty (in any of the armed forces) for four or more years before 25 Jun 1950, you are not eligible to receive a bonus, unless you were a resident of Pennsylvania not only when you entered the service, but also on 1 Jan 1961.

The maximum payment is $500. Survivors of eligible personnel who died while on active duty between 25 Jun 1950 and 27 Jul 1953 may receive a $500 payment.

If you qualify for the bonus, your request for an application should be sent to:

Korean Conflict Veteran's
Compensation Bureau
Department of Military Affairs
Commonwealth of Pennsylvania
Harrisburg, Pa.

The deadline for filing is 31 Dec 1963.

A roundup of this and other state bonus laws is contained in BuPers Inst. 1760.3.

• CPO ADVANCEMENTS—A big package was under the Christmas tree last month for E-7s and E-8s who were advanced to E-8 and E-9 respectively.

A list of 4052 men to be advanced to E-8 and 720 men to be advanced to E-9 accompanied BuPers Notice 1430. Their commanding officers were instructed to advance those named to their new grades effective 16 December 1961, unless they proved ineligible for advancement, were physically disqualified, declined to sign an obligated service agreement, or did not reenlist or extend their enlistments.

• USAFI ARITHMETIC COURSE—A revised course in review arithmetic is now available through USAFI, Madison, Wis.

Numbered C-150, and titled *Review Arithmetic*, the course is designed as a refresher for those persons interested in reviewing the basic principles of arithmetic. Material covered is similar to that offered in refresher courses by civilian schools at the high school level. A few new topics are introduced, and discussions of some previously taught topics are expanded.

Included in the course are addition, subtraction, multiplication, division, fractions, decimals, percentages, measures, scale drawing, square roots, ratios, graphs, proportions and problem solving.

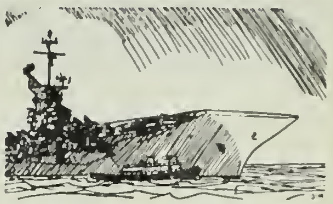
The course is being offered for both the correspondence (17 lessons) and group-study methods. Prerequisites are either a course in arithmetic similar to A-035, or eighth-grade ability in the subject. See your I and E officer for more details.

• ACTIVE DUTY RESERVISTS—The Chief of Naval Personnel has revised the list of open rates in which certain active-duty Naval Reservists may enlist in the Regular Navy, provided they are qualified in all respects under BuPers Inst. 1130.4F.

This revised list, recently announced as change nine to the instruction, contains a total of 74 open rates. They are:

SR, SA, SN
FR, FA, FN
AR, AA, AN
ADR3
ADJ3, 2, 1
AT3, 2, 1
AO3
AQ3, 2, 1
AC3
AE3
PR3, 2
PH3
PT3
BT3
BR1, C
CT3, 2
CE3
ET3, 2, 1, C
EM3, 2, 1
FT3, 2, 1
GMT3, 2, 1, C
GS3, 2, 1, C
IC3, 2, 1
MM3, 2, 1
MR3, 2
MU3
PC3
QM3, 2
RD3, 2, 1
RM3, 2, 1
SM3
SO3, 2, 1
SW3
TM3

QUIZ AWEIGH



A few years ago you could probably name almost every type of ship in the Navy and tell her letter designation. In today's Navy, however, there are so many new types, each with a special job to do, we wonder if you are still able to do this. Test yourself.

1. Three AGOR type ships are currently under construction and should be launched this year. An AGOR is: (a) an Amphibious Force Flagship (ocean radar); (b) an Oceanographic Research Ship; (c) an Icebreaker Repair Ship, or; (d) a Surveying Ship, Radar.

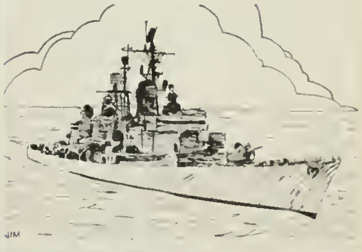
2. The DLG type ship pictured below is already in service, and 10 more are currently under construction. A DLG is: (a) a Guided Missile Destroyer Leader; (b) a Frigate; (c) a Guided Missile Destroyer (large), or; (d) a Guided Missile Frigate.

3. Only one PC(H) is under construction. It is the first of the type and could usher in a new era in ship design. A PC(H) is a: (a) Patrol Craft (heavy); (b) Patrol Craft (hydrofoil); (c) Submarine Chaser (heavy), or; (d) Submarine Chaser (hydrofoil)

4. The AGM is also one of a new class. It was recently delivered to the Navy and should play an important role in the modern Fleet. An AGM is: (a) a Surveying Ship (medium); (b) an Icebreaker (medium); (c) a Missile Range Instrumentation Ship, or; (d) a Guided Missile Ship (auxiliary).

5. Three converted ships are currently in service as LPHs and several others are under construction. An LPH is: (a) an Amphibious Assault Ship; (b) a Helicopter Assault Aircraft Carrier; (c) an Amphibious Patrol Ship, or; (d) a Landing Ship (heavy).

Turn to page 54 for the correct answers.



THE BULLETIN BOARD

Rules and Regs on Medals and Awards, and How to Wear Them

MEDALS AND RIBBONS represent the thanks of a nation for services rendered in its honor. They commemorate entire wars, single campaigns, noteworthy service or group and personal heroism.

U. S. military medals originated during the Revolution. The first, voted by Congress on 25 Mar 1776, was a gold medal commemorating the evacuation of Boston by the British. It was presented to George Washington.

Later, it was Washington who established a decoration for individual service, with a general application to the enlisted man.

This was the Order of the Purple Heart, a decoration comprised of a "figure of a heart in purple cloth or silk, edged with narrow lace or binding." It was presented to men who performed service of "unusual gallantry and extraordinary fidelity." (After the Revolution, the Order of the Purple Heart disappeared. It was revived by the Army on 22 Feb 1932 out of respect for Washington and his military achievements. The Navy began to use the award again in 1942. The medal itself bears the impression of General Washington. It is now awarded only to men killed or wounded in action).

Through the years, medals and ribbons have become firmly established in Navy tradition. Today there is a wide variety of awards in several categories.

Award is an all-inclusive term for *decorations, medals, badges* and *ribbons*.

Decoration is a mark of honor conferred on an individual for a specific act of gallantry or meritorious service.

Medal is a mark of distinction distributed to individuals who have participated in designated wars, campaigns or expeditions, or who have performed some special service. It consists of a suspension ribbon and medallion.

Badge is a distinctive device worn as a sign of special qualifications aside from the normal duties of rank or rate. It is a medallion hung from a bar.

Service Ribbon is a length of the same ribbon which supports a decoration or medal, worn in lieu of the actual award on the service dress uniform.

Unit Award is made to an operating unit and worn only by members of that unit who participated in the cited action.

Service Award is made to those who have participated in designated wars, campaigns, expeditions, etc., or who have fulfilled, in a creditable manner, specified service requirements.

Miniature Medal is a half-scale replica of a large medal.

Rosette is a lapel device made by gathering the suspension ribbon of a medal into a circular shape.

Lapel Button is a miniature replica of a ribbon or ribbon bar.

Attachment is any star, letter, clasp or other device worn on the suspension ribbon of a medal or on the service ribbon.

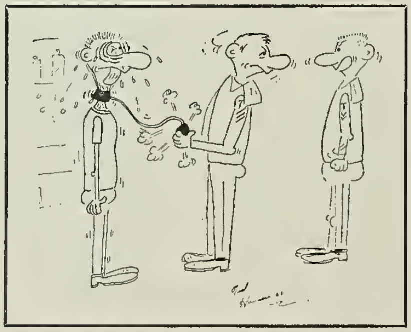
Here's a summary of the various awards authorized to be worn on the Navy uniform.

- ***Military Decorations*** – These, in their order of precedence, are the military decorations authorized for the Navyman.

Medal of Honor

Awarded to: Any person who, while in the naval service of the United States, in action involving actual combat with the enemy, or in the line of his profession, distinguishes himself conspicuously by gallantry and intrepidity at the risk of his life above and beyond the call of duty and without detriment to the mission. *This medal may be awarded for combat or non-combat action.*

All-Navy Cartoon Contest
Peter Arthur Hansen, EN2, USN



"For the last time, Clagget, blood pressure is taken on the arm."

Time limits for recommendations or awards: Must be recommended within three years from date of distinguished act or service and awarded within five years from date of act or service.

Navy Cross

Awarded to: Any person serving with the naval service of the United States, who distinguishes himself by extraordinary heroism in connection with military operations against an armed enemy. *Awarded for combat only.* Time limits for recommendations or awards are the same as those for the Medal of Honor.

Distinguished Service Medal

Awarded to: Any person who, while serving in any capacity with the Navy of the United States after 6 Apr 1917, distinguished himself by exceptionally meritorious service to the government in a duty of great responsibility. *Awarded for combat or non-combat action.* Time limits for recommendations or awards are the same as those for the Medal of Honor.

Silver Star Medal

Awarded to: Any person who, while serving in any capacity with the Navy of the United States since 6 Dec 1941, distinguished himself conspicuously by gallantry and intrepidity in action not sufficient to justify award of the Medal of Honor or Navy Cross. *Awarded for combat action only.* Time limits for recommendations or awards are the same as those for the Medal of Honor.

Legion of Merit

Awarded to: Personnel of the

armed forces of the United States and friendly foreign nations who, since 8 Sep 1939, have distinguished themselves by exceptionally meritorious conduct in the performance of outstanding service. *Awarded for combat or non-combat action.* The time limit is the same as that for the Medal of Honor. (The Legion of Merit is awarded to U. S. personnel without reference to degree. It is awarded to foreign personnel in four degrees – Chief Commander, Commander, Officer or Legionnaire).

Distinguished Flying Cross

Awarded to: Any person who, while serving in any capacity with the Army, Air Corps, National Guard or Organized Reserves, or with the United States Navy, Marine Corps, Coast Guard or Air Force after 6 Apr 1917, has distinguished himself by heroism or extraordinary achievement while participating in an aerial flight. *Awarded for combat or non-combat action.*

Time limits for recommendations or awards: Must be recommended within two years from date of distinguished act or service, and awarded within three years from date of act or service.

Navy and Marine Corps Medal

Awarded to: Any person who, while serving in any capacity with the United States Navy or Marine Corps, including Reserves, shall have since 6 Dec 1941 distinguished himself or herself by heroism not involving actual conflict with an enemy, or to any person to whom the Secretary of the Navy has formerly awarded a letter of commendation for heroism, regardless of date, subject to approval of the Board of Decorations and Medals. *Awarded for non-combat action only.*

Time limits for recommendations or awards: Must be recommended within three years from date of distinguished act or service, and awarded within five years from date of act or service, except when awarded in lieu of commendation previously awarded for heroism.

Bronze Star Medal

Awarded to: Any person who, while serving in any capacity in or with the Army, Navy, Marine Corps or Coast Guard of the United States on or after 7 Dec 1941, distinguishes (or has distinguished) himself by heroic or meritorious achievement or service, not involving participation in aerial flight, in connection with military or naval operations against an enemy of the United States. *Awarded for combat action only.* The time limit is the same as that for the Medal of Honor.

Where to Write for Medals You Have Not Received

What should you do when you think you're eligible for some medal or decoration, but have not received it?

Simply submit a request, via your commanding officer, to the Chief of Naval Personnel, Navy Department, Washington 25, D.C. If you are asking about a campaign or service medal, address the request to Pers E-24 (for officers) or Pers E-3 (for enlisted men). If the request concerns a personal decoration which you feel you are entitled to receive, but which has not been awarded to you, address it to Pers G-25, and forward whatever evidence you may have of your entitlement.

Air Medal

Awarded to: Any person who, while serving in any capacity in or with the Army, Navy, Marine Corps or Coast Guard of the United States after 8 Sep 1939, distinguishes (or has distinguished) himself by meritorious achievement while participating in an aerial flight. *Awarded for combat or non-combat action.* The time limit is the same as that for the Medal of Honor.

Navy Commendation Medal

Awarded to: Any person of the Navy, Marine Corps or Coast Guard who has received an individual letter of commendation, signed by the Secretary of the Navy; the Commander in Chief, United States Fleet; the Commander in Chief, United States Pacific Fleet; or the Commander in Chief, United States Atlantic Fleet, for an act of heroism or service performed between 6 Dec

WHAT'S IN A NAME

Run Around

The next time you are out on deck getting the run around as part of today's physical fitness program, don't blame the modern Navy for originating the idea.

Although the present exercise program is perhaps more formalized and includes more tests, the run around part of it goes back many years.

The following story, which appeared in a magazine back in 1898, tells of just this sort of exercise being done aboard one of the Great White Fleet battleships during its cruise around the world:

"The band plays a lively march and the order for the run around is given. Jackie [short term used in those days for Bluejackets] likes this. It is his exercise. It is to him what 'wheeling' is to the landsman.

"It is his opportunity of moving a little faster than usual. In double-quick time each section runs in an ellipse for five minutes, the line of sailors usually being barefooted at this time of the day. They dodge in and out of the sunlight and shadow, laughing and showing the gaiety of their feeling."

In common usage today, to get the run around means that somebody is putting you on or passing the buck at your expense. In the 1800s, however, the term was described as "gymnostics of youth," and was illustrated by sailors "descending from considerable heights, sliding down a rope by their hands."

The next time you're out running around during a physical fitness session, and someone tells you it wasn't like this in the old Navy — tell him.

1941 and 11 Jan 1944, and to any person of the above services who later received such a commendation signed by the Secretary of the Navy or other designated authorities, provided the letter of commendation specifically authorized the Commendation Medal. *Awarded for combat or non-combat action.* The time limit is the same as that for the Medal of Honor.

Purple Heart

Awarded to: Persons wounded in action against an enemy of the United States while serving with the Navy, Marine Corps or Coast Guard of the United States, if the wound necessitated treatment by a medical officer. Also awarded to next of kin of persons killed in action. *Awarded for combat action only.* No time limit for recommendations or awards.

- ***Unit Awards*** — These, in their order of precedence, are the unit awards authorized for wear. They rank after the military decorations.

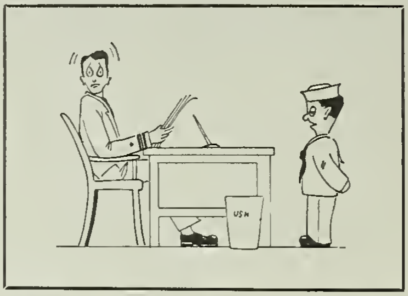
Presidential Unit Citation

Awarded to: Any ship, aircraft or naval unit, or any Marine aircraft detachment or higher unit for outstanding performance in action on or after 16 Oct 1941. *Awarded for combat action only.* The time limit for recommendations is the same as that for the Medal of Honor.

Navy Unit Commendation

Awarded to: Any ship, aircraft detachment or other unit in the naval service of the United States for outstanding heroism in action against the enemy, but not sufficient to justify award of the Presidential Unit Citation; or for extremely meritorious service not in combat, but in support of military operations. (Awarded by the Secretary of the Navy only). *Awarded for combat or non-combat action.* The time limit is the same as that for the Medal of Honor.

All-Navy Cartoon Contest
William V. Rockett, AM2, USN



"Yes, sir, I mailed them . . . at the last mail buoy we passed."

- ***Non-military Decorations***—The following non-military decorations are authorized for wear on the naval uniform after unit awards:

Gold and Silver Life-Saving Medals

Awarded to: Any person who rescues, or endeavors to rescue, any other person from drowning, shipwreck or other peril of the water. The rescue or attempted rescue must take place in waters within the United States or subject to the jurisdiction thereof, or if the rescue or attempted rescue takes place outside such waters, one or the other of the parties must be a citizen of the United States or from a vessel or aircraft owned or operated by citizens of the United States. (These medals are awarded by the Secretary of the Treasury. Part VI of the *Navy and Marine Corps Awards Manual* contains detailed information).

Medal for Merit

The Medal for Merit was created by an act of Congress for the purpose of rewarding civilians of the nations prosecuting the war under the joint declaration of the United Nations, and of other friendly foreign nations, who have, subsequent to the proclamation of an emergency by the President, distinguished themselves by exceptionally meritorious conduct in the performance of outstanding services. (Terminating date for the award of the medal for WW II service is 31 Dec 1946).

Medal of Freedom

The Medal of Freedom, created by Executive Order 9586 of 6 Jul 1945, may be awarded to any person, other than a member of the armed forces, who on or after 7 Dec 1941 shall have performed a meritorious act or service which aided the United States in the prosecution of a war against an enemy or enemies, aided any nation engaged with the United States in the prosecution of a war against a common enemy or enemies, or furthered the interest of the security of the United States or of any nation during a period of national emergency.

National Security Medal

The National Security Medal (created 19 Jan 1953) may be awarded to any person, without regard to nationality, including a member of the armed forces of the United States, who, on or after 26 Jul 1947, has made an outstanding contribution to the national intelligence effort. This contribution may consist of either exceptionally meritorious service performed in a position of high responsibility, or of an act of valor requiring personal courage of a high degree and complete dis-

New Award: SecNav Commendation for Achievement

The Navy's newest award is the Secretary of the Navy Commendation for Achievement — established last May by SecNav in recognition of the superior professional achievements of active duty junior officers (LCDR and below) and enlisted personnel. The award consists of a citation and a ribbon. (The ribbon is patterned after the Navy Commendation Ribbon, but has orange stripes instead of white.)

For officers, the SecNav Achievement Award recognizes original and constructive professional achievements in the areas of operation, administration or management. For enlisted personnel, it is awarded in recognition of superior leadership achievement, or other services which result in "a significant contribution to the naval service."

The award should be recommended only when the achievement is such that special notation in fitness or evaluation reports would not be appropriate recognition, and when the service is not sufficient to deserve recommendation for some higher award, such as the Navy Commendation Medal. Recommendations should be forwarded to SecNav in the same manner as other awards.

SecNav Inst. 1650.16 contains other details.

regard for one's personal safety.

Other non-military decorations authorized for wear on the naval uniform are:

Navy Distinguished Public Service Award; National Aeronautics and Space Administration Distinguished Service Medal; Merchant Marine Distinguished Service Medal; Merchant Marine Meritorious Service Medal; and ***Merchant Marine Mariner's Medal.*** (If you have been awarded, and are authorized to wear, more than one non-military decoration, such decorations must be worn in the order of date of acceptance, except that when two or more decorations from the same agency are worn, the order of wearing will be in accord with precedence established by that agency).

• ***Service Awards*** — The *Navy and Marine Corps Awards Manual* gives the who, what, when, where and why of the various service awards. In their order of precedence, they are the:

Reserve Special Commendation Ribbon
Navy Good Conduct Medal
Naval Reserve Meritorious Service Ribbon
Naval Reserve Medal
Byrd Antarctic Expedition Medal
Second Byrd Antarctic Expedition Medal
U. S. Antarctic Expedition Medal
Navy Expeditionary Medal
Victory Medal (WW I)
Haitian Campaign Medal (1919-20)
Second Nicaraguan Campaign Medal
Yangtze Service Medal
China Service Medal (1937-39)
American Defense Service Medal
Area Campaign Medals (worn in the order earned)
  a. American Campaign Medal
  b. European-African-Middle Eastern Campaign Medal
  c. Asiatic-Pacific Campaign Medal
Victory Medal (WW II)
Medal for Humane Action
Navy Occupation Service Medal
China Service Medal (1945-47)
National Defense Service Medal
Korean Service Medal
Antarctica Service Medal
Armed Forces Reserve Medal
Merchant Marine Gallant Ship Unit Citation
Merchant Marine Defense Bar
Merchant Marine Combat Bar
Merchant Marine War Zone Bars (worn in order earned)
  a. Atlantic War Zone
  b. Mediterranean-Middle East War Zone
  c. Pacific War Zone
Merchant Marine WW II Victory Medal
Merchant Marine Korean Service Bar

Colors on Ribbons Have A Special Significance

The colors used in U. S. decorations are usually based on our national colors of red, white and blue, or colors associated with some historic or military event.

The colors for service ribbons are basically those of a wartime opponent, in combination with our national colors or colors symbolic of some particular battle or association.

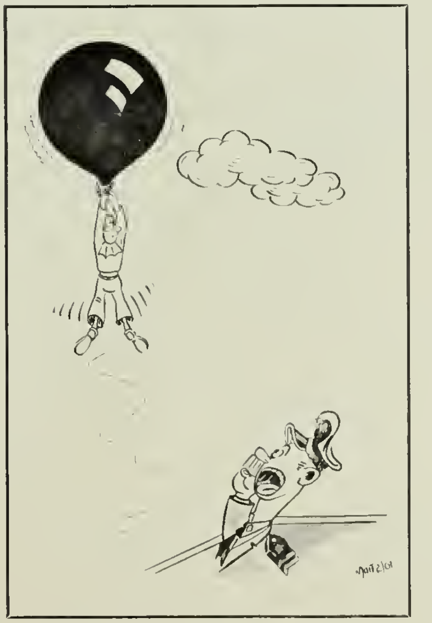
The width and arrangement of stripes on ribbons are usually a matter of design, and have no other significance.

• ***Foreign Decorations and Non-U. S. Service Awards*** — Personnel who are specifically authorized by law to accept decorations from foreign governments (see box, page 53) may wear them in the order of their receipt, after all U. S. service awards. If you possess two or more awards from the same country, the order of precedence of those awards is determined by the rules of the country concerned.

These awards, listed in their order of precedence, *do not require legislative authorization,* and may be worn immediately after all foreign decorations:

United Nations Service Medal
United Nations Medal
Philippine Defense Ribbon
Philippine Liberation Ribbon
Philippine Independence Ribbon
Philippine Republic Presidential Unit Citation
Korean Presidential Unit Citation
Vietnam Presidential Unit Citation

All-Navy Cartoon Contest
LCDR George P. Matherson, USN



"Does it look like rain up there?"

• ***Marksmanship Badges and Awards*** — These are the marksmanship awards authorized for wear on the naval uniform (listed in order of precedence).

Distinguished Marksman Badge
Distinguished Pistol Shot Badge
National Trophy Match Rifleman Badge (Gold)
National Trophy Match Pistol Shot Badge (Gold)
Navy Rifleman Badge (Gold)
Navy Pistol Shot Badge (Gold)
Fleet Rifleman Badge (Gold)
Fleet Pistol Shot Badge (Gold)
(National, Navy and Fleet Badges continue in the order above with silver taking precedence over bronze.)
Expert Rifleman Medal
Expert Pistol Shot Medal
President's Hundred Award (Enlisted Personnel only)

• ***Awards of Organizations*** — Several awards of military societies and other organizations are authorized for wear on the naval uniform. These organizations are the:

Regular Army and Navy Union
Army and Navy Union of the United States
American Legion, Veterans of Foreign Wars or other officially recognized veterans organizations
Corps and Divisions of the Civil and Spanish-American Wars
Medical scientific societies

Such medals and ribbons are worn in the order earned, after all U. S. service awards. Badges are worn in the order earned after marksmanship badges.

All awards authorized for the Navy uniform must be worn correctly if they are to have true meaning. The correct manner of wearing decorations, medals, ribbons and badges is contained in *U. S. Navy Uniform Regulations.*

Service ribbons, worn on service dress uniforms in the order of their precedence, are laid out in horizontal rows of three each. If not in multiples of three, the uppermost row (centered) must contain the lesser number of the ribbons.

Ribbons are worn without intervals between ribbons or rows of ribbons. On men's uniforms they are worn with the lower edge of the bottom row centered approximately one-fourth of an inch above the left breast pocket. On women's blue and white uniforms, one or two rows of ribbons are worn centered on the left pocket flap, with additional rows immediately above the flap. On the light blue jacket, ribbons are worn in the same relative position as on the blue and white coats.

If you possess six or more service ribbons you are required to wear a minimum of six (of highest precedence). However, all may be worn if desired. The arrangement is by precedence, from top "inboard" to bottom "outboard."

Ribbons may be sewed to uniforms or arranged on a bar to be attached to the uniform. They should not be covered with a transparent material of any sort.

Ribbons which do not have a symmetrical color design, or which have stars as part of the design are displayed as follows:

Medal of Honor Ribbon. The stars should form an "M" with the single ray of all stars pointing up.

Navy and Marine Corps Ribbon. The blue stripe is to the wearer's right.

Presidential Unit Citation Ribbon. The blue stripe is uppermost.

Merchant Marine Mariner's Ribbon. The blue stripe is to the wearer's right.

World War II Theater Ribbon. The blue stripe in the center is to the wearer's right.

Navy Occupation Service Ribbon. The black stripe is to the wearer's right.

Merchant Marine Combat Bar. The dark blue stripe is uppermost.

Philippine Defense Ribbon. The stars form a triangle, base down.

Philippine Liberation Ribbon. The blue stripe in the center is to the wearer's right.

Philippine Republic Presidential Unit Citation Ribbon. The blue stripe is to the wearer's right; worn with gold frame.

Korean Presidential Unit Citation Ribbon. The red portion of the circular device in the center is uppermost; worn with gold frame.

Vietnam Presidential Unit Citation Ribbon. Worn with gold frame.

Large medals are worn with the full dress uniform. The holding bar of the lowest row of medals should be located in the same position as the lowest ribbon bar, except that it may be placed just above sewed-on ribbons, which should be covered by a patch.

Each row of medals should be three-and-one-quarter inches long from top of ribbons to bottom of medals, so that bottom of medals dress in a horizontal line. When more than one row is worn, no row is to contain a lesser number of medals than the row above. Except for the uppermost row, all rows should contain the same number of medals, three medals side by side, or up to five medals overlapping. Overlapping should be equal, with the right (inboard) medal showing in full. Upper rows should be mounted so they cover the suspension ribbons of medals below.

The arrangement of medals is by seniority, from top down and from inboard outboard. Although all medals you possess may be worn, a minimum of five large medals must be worn if you possess five or more.

The Medal of Honor pendant is worn from a suspension ribbon placed around the neck. When worn with the officer's white service coat, the ribbon passes outside the coat collar. When worn with all other coats the ribbon passes between the shirt and coat collar. With enlisted jumpers the ribbon passes directly around the neck.

Miniature medals (for officers) are worn with evening dress uniforms, dinner dress blue jacket uniforms, and the dinner dress white jacket uniform. *Uniform Regs* should be consulted for a complete explanation of proper miniature medal display.

Badges are worn centered immediately above the left breast pocket and arranged according to seniority from inboard outboard. Exception: The President's Hundred award is worn on the left shoulder of enlisted uniforms.

Only one badge for a specific type of weapon may be worn at any one time, but two excellence in competition badges for the same weapon are authorized. Marksmanship badges received while in another service may be worn if desired.

When ribbons are prescribed, the badges are worn immediately below the bottom row of them. When large medals are prescribed, the badges are worn below the bottom row of medals, with only the medallion of each badge visible. Badges are not worn with miniature medals.

Certain insignia may be attached to decorations, medals, miniatures and service ribbons. Common attachments are small gold, bronze and silver stars. *Gold stars* indicate a second or subsequent award of a decoration. *Bronze stars*, slightly smaller than gold or silver stars, are used to indicate actual service in a cited unit at the time of an action for which the unit citation was received, second and subsequent awards of a service medal, or the engagements in which an individual participated during the campaign for which a medal is authorized.

GM2 Grabs Hot Ammo To Save Shipmates from Injury

A gunner's mate who chucked a round of smoking, smoldering ammunition over the side of his ship, after the gun he had been firing expelled it on deck, has been awarded the Navy and Marine Corps Medal.

Alfred W. Jones, Jr., GM3, the captain of a 3-inch gun mount aboard USS *Willard Keith* (DD 775), was at his station during an anti-aircraft exercise near Guantanamo Bay, Cuba, last March, when his gun's automatic loading mechanism failed and expelled a round of ammo on deck.

The fuze of the shell was broken and smoking. Jones jumped from the gun mount, picked it up, and threw it over the side.

During a recent ceremony aboard *Keith*, the ship's commanding officer presented Jones with the Navy and Marine Corps Medal and a citation which had been signed by the Secretary of the Navy. It read in part: "By his prompt and courageous action, he undoubtedly prevented possible serious injury or death to personnel in the vicinity and averted damage to the ship."

Jones, who is married, enlisted in the Navy three years ago.

Rules Concerning Awards from Foreign Governments

If you're ever a hero on foreign shores, or you perform some outstanding work for a foreign government, you must first obtain the consent of Congress before accepting any decoration, gift, office or title from that government.

But you don't necessarily have to refuse the award to comply with this rule. If you are told a foreign nation has made an award to you, and that your presence is desired at a formal presentation ceremony, you will be allowed to participate in the ceremony and receive the award. Then, immediately following the ceremony, you must forward the decoration and all papers, such as citations or diplomas, to the Chief of Naval Personnel, via chain of command, with a statement of explanation.

The Chief of Naval Personnel will seek the necessary approval of the Chief of Naval Operations and forward the award to the Department of State, pending enactment of legislation by Congress which authorizes you to accept it.

This applies even if the service for which the award was made was not related to your military duties. And this same procedure must be followed by members of your immediate family, if any of them receive such an award.

The regulations do not apply to any foreign decoration awarded for services performed while you were a member of the armed forces of a friendly nation, provided it was accepted before you entered the U. S. Navy. However, if you have been awarded such a decoration you must make application to the Secretary of the Navy for authorization to wear it on your uniform.

Once Congress has approved your award, you must follow these requirements in wearing it.

No foreign award is worn on the uniform unless at least one U. S. award is worn at the same time.

Foreign awards which are similar in design to U. S. awards may be worn on the same occasions prescribed for the wearing of U. S. awards.

If you do not possess the Medal of Honor, but receive a foreign decoration which is required to be worn at the neck, it must be worn in that manner. If you possess the Medal of Honor, you wear both at the neck, in such a manner that the foreign award shows below the Medal of Honor.

Silver stars are worn in lieu of five gold stars on the ribbons of decorations. They are also worn in lieu of five bronze stars on the ribbons of medals. The first star is centered upon the ribbon. If more than one is authorized, they are placed in a horizontal line close to and symmetrically about the center of the ribbon. One ray of the star should point down.

Metal letters are not uncommon on the ribbons of certain awards. A *bronze* "V" indicates the award was made for acts or services involving direct participation in combat operations. A *silver* "W" indicates service in the defense of Wake Island (7 to 22 Dec 1941). A *bronze* "A" indicates service on vessels in actual or potential belligerent contact with Axis forces in the Atlantic during World War II.

Clasps are worn on the suspension ribbons of large medals only. When worn with other attachments the clasp is displayed below the award. Bronze stars and letters worn in lieu of clasps are authorized for wear on the suspension ribbons of miniature medals and on service ribbons.

Other devices are as follows:

Airlift Device — Naval personnel serving at least 90 consecutive days with units in direct support of the Berlin Airlift between 26 Jun 1948 and 30 Sep 1949 are eligible to wear a gold colored miniature of a C-54 aircraft centered on the suspension ribbon of the Navy Occupation Service Medal and on its service ribbon. (The nose of the aircraft should point upward at a 30-degree angle and toward wearer's right).

Fleet Marine Force Combat Operation Insigne — Navy personnel who served on duty with, and who have been attached to, Fleet Marine Force units in active combat with an armed enemy (beginning with WW II) are authorized to wear a bronze, miniature Marine Corps emblem centered on the suspension ribbon and the service ribbon of the ap-

All-Navy Cartoon Contest **Theo H. Tennant, YNC, USN**

"Jackson, I like your attitude. Whenever I tell you to do something, you jump right to it. You can always be depended upon to carry out any assignment with the highest degree of efficiency. . . ."

". . . Now then, get a haircut or you're on report."

propriate WW II area campaign medal or the Korean Service Medal.

Hour Glass—Naval Reservists may be awarded the Hour Glass device, in lieu of a second or subsequent Armed Forces Reserve Medal, for each succeeding 10 years of service.

Here are some other notes concerning awards:

Non-military decorations are not worn on the uniform unless at least one military award is worn.

Military society awards or medals, ribbons and badges of other civilian organizations may be worn only while actually attending meetings or conventions, or while participating in parades or other ceremonies as a member.

Civilian clothing is proper attire for certain awards. Miniature medals may be worn with evening dress (white tie). The Medal of Honor, for which there is no miniature, may be worn with evening dress. Miniature replicas, ribbons made in the form of lapel buttons or ribbons made in rosette form may be worn on the left lapel of civilian clothes other than evening dress.

Service buttons may be worn on the left lapel of civilian clothing (not evening dress).

Awards received for service performed while in the Army, Air Force, Marine Corps or Coast Guard, which are not listed in this article, but which are equal to those listed, are worn in the order specified by the service branch concerned—subject to these stipulations:

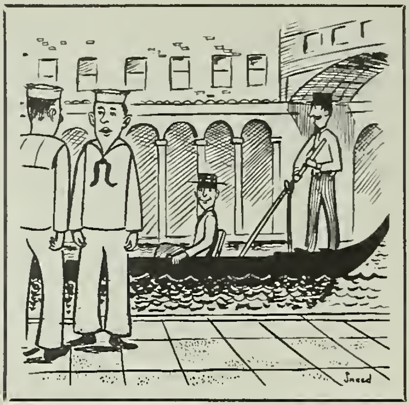
- In all cases of relative priority, Navy awards shall take precedence.
- Awards for wars, campaigns, expeditions, etc., shall be worn as service awards in their chronological sequence.

The Navy and Marine Corps Awards Manual (NavPers 15790) and *U. S. Navy Uniform Regulations* (NavPers 15665) are the authoritative guides on awards.

ANSWERS TO QUIZ AWEIGH

1. (b) an Oceanographic Research Ship.
2. (d) a Guided Missile Frigate.
3. (b) Patrol Craft (hydrofoil).
4. (c) a Missile Range Instrumentation Ship.
5. (a) an Amphibious Assault Ship.

Quiz Aweigh is on page 47.



"Boy, back home the folks would be all shook up over a flood like this!"

Eligibility List Names Ships and Units Qualifying For Antarctica Service Medal

Any member of the United States armed forces or, for that matter, almost anyone else who has participated in a U. S. Antarctic expedition (or in a foreign Antarctic expedition which worked in coordination with a U. S. expedition) since 1 Jan 1946 is eligible for the Antarctica Service Medal.

No minimum amount of time has been specified as an eligiblity requirement for the decoration, and it may be awarded posthumously. For those who spent a winter at the bottom of the world there is a bronze clasp, to be worn on the medal's suspension ribbon, bearing the words "Wintered Over."

A gold clasp will be awarded to those who have spent two winters at Antarctica and a silver one, to veterans of three or more Antarctic winters.

The medal and clasps are not yet available, but the ribbon bar may be purchased by eligible personnel from ships stores, Exchanges or shops which sell military supplies.

The list of ships and units which have participated in expeditions below 60° South since 1 Jan 1946 includes:

SHIPS

USNS *Alatna* (TAOG 81)
USS *Arneb* (AKA 56)
USS *Atka* (AGB 3)
USS *Brough* (DE 148)
USS *Brownson* (DD 868)
USS *Burton Island* (AGB 1)
USS *Cacapon* (AO 52)
USS *Canisteo* (AO 99)
USS *Currituck* (AV 7)
USS *Curtiss* (AV 4)
USS *Edisto* (AGB 2)
USS *Glacier* (AGB 4)
USNS *Greenville Victory* (TAK 237)
USS *Henderson* (DD 785)
USS *Merrick* (AKA 97)
USS *Mount Olympus* (AGC 8)
USS *Nespelen* (AOG 55)
USS *Peterson* (DE 152)
USS *Philippine Sea* (CV 47)
USS *Pine Island* (AV 12)
USNS *Private John R. Towle* (TAK 240)
USNS *Private Joseph F. Merrell* (TAK V-4)
USS *Sennet* (SS 408)
USS *Staten Island* (AGB 5)
USS *Wilhoite* (DER 397)
USS *Wyandot* (AKA 92)
USS *Yancey* (AKA 93)
USCGC *Northwind* (WAGB 282)
USCGC *Westwind* (WAGB 281)
USCGC *Eastwind* (WAGB 279)

UNITS

Staff, Commander U. S. Naval Support Force, Antarctica (TF-43)
Staff, Commander U. S. Naval Task Force 39
Staff, Commander U. S. Naval Task Force 68
U. S. Naval Antarctic Support Activities
U. S. Naval Support Unit III, Antarctica
U. S. Naval Cargo Handling Battalion One
U. S. Naval Cargo Handling Battalion Three (Detachment Bravo)
U. S. Naval Mobile Construction Battalion Special
U. S. Naval Mobile Construction Battalion Special (Detachment Bravo)
U. S. Naval Mobile Construction Battalion One
U. S. Naval Construction Battalion Reconnaissance Unit
U. S. Naval Helicopter Utility Squadron One
U. S. Naval Helicopter Utility Squadron Two
U. S. Naval Helicopter Utility Squadron Two (Detachment 69)
U. S. Naval Snow Compaction Team from Construction Battalions Pacific
Air Development Squadron Six

The cutoff date for eligibility has not yet been determined. Additional details may be found in SecNav Inst. 1650.14.

You Too Can Be a Good Driver

A 10-hour driver improvement course — mandatory for all enlisted personnel under 25 years of age — has been introduced at the Long Beach Naval Station.

Besides that course, other parts of the station's "Operation Drive Safe" include a 20-hour course for the station's driving instructors and accident prevention rallies before holiday week ends.

In addition, all private autos are thoroughly checked before a base sticker is issued, and all enlisted transients get driving instruction.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnovs, NavActs, Instructions and Notices for complete details before taking action.

Alnovs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 55 – Reminded all hands to drive safely.

No. 56 – Added Czechoslovakia and Ethiopia to list of exempted countries concerned with reductions in personal expenditures overseas, as earlier discussed in Alnav 43. Pointed out that the "Ireland" cited in Alnav 43 includes Northern Ireland.

No. 57 – Announced approval by the President of the reports of selection boards that recommended active duty officers for promotion to lieutenant commander and commander.

No. 58 – Contained the farewell message of Secretary of the Navy John B. Connally.

No. 59 – Contained greetings and best wishes of Under Secretary of the Navy Paul B. Fay, Jr.

No. 60 – Announced establishment of new commuted ration rates for enlisted personnel.

No. 61 – Announced that the ratings of BR, MM, MR, CE, PH and AG are to be included in the proficiency pay program as critical skills for P-1 awards.

Instructions

No. 1220.26 – Implements the Navy Enlisted Classification (NEC) assignment control system for all active duty enlisted personnel.

No. 1301.34A – Defines the items on the Officer Data Card (NavPers 2626); provides instruction for verification of the ODC; and outlines procedures for the submission of corrected or additional information.

No. 1500.25H – Announces dates for fiscal year 1963 for classes at training activities under the management control of the Chief of Naval Personnel and certain schools of other services in which the Chief of Naval Personnel fills established student quotas.

No. 1710.1G – Describes basic policies and procedures governing the conduct of the All-Navy and Interservice Sports Championships.

Notices

No. 1080 (20 November) – Advised commands of procedural changes in the Naval Manpower Information System and in the enlisted personnel accounting system.

No. 1418 (20 November) – Announced the schedule for February Navy-wide examinations for enlisted personnel.

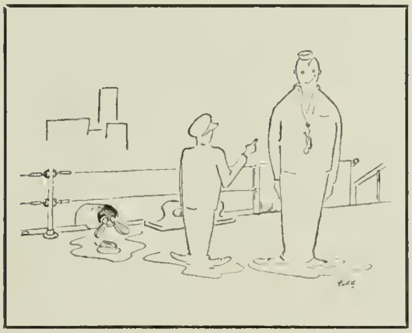
Eligibility Requirements Revised For Officers Seeking Submarine Training

Officers who want to get to the bottom of things will be interested to know the standards of eligibility for officer submarine training have been revised.

Application may now be made by any unrestricted line officer who is an ensign or lieutenant (JG) or by any prospective unrestricted line officer, regardless of source, if he will be commissioned before the convening date of the class for which he applies.

Submarine School classes begin quarterly at Groton, Conn., and last about six months. Any officer who successfully completes the course is eligible for duty in submarines, and has a shot at early command.

All-Navy Cartoon Contest
Stanley James Rudge, ADJ2, USN



"Higgins, that is not the way a chief is piped over the side."

Those who make the best grades in school will be eligible for assignment to nuclear power training.

Applicants must have at least one year of obligated service remaining after they complete the course. Newly commissioned officers must have a minimum of three years' service remaining after graduation.

Officers who graduate from the Naval Academy or Regular NROTC units will have no difficulty in meeting this requirement, but officers from other sources, such as the contract NROTC and OCS programs, must agree to obligated service to fulfill this requirement.

Since submarine training is of a highly technical nature, applicants should have a baccalaureate in science or engineering, or at least have credits in physics and math.

An example of the form which applications should take can be found with BuPers Inst. 1520.6J, which also contains full details concerning requirements. Standard Forms 88 and 89 must accompany the applications.

Selections are made by Submarine School selection board, and successful candidates are notified by BuPers Notice when the Chief of Naval Personnel has approved the Board's proceedings.

SubPac Seaman School

There's something new in training techniques: A school which prepares seaman apprentices of the Pearl Harbor Submarine Base for their third white stripe.

The Caterina School for Seamen (it was the idea of, and is run by, Frank Caterina, FTC, USN, who is in charge of the sub base training division) was officially opened last September. Its curriculum is based on the Navy Training Course for Seaman (NavPers 10120 D).

The complete course lasts about a week. At least 18 hours of classroom study plus home (or barracks) work is required of each student.

To be eligible for the school, SUBPAC SAs must first complete the *Basic Military Requirements* (NavPers 10054) course. All the practical factors required for advancement to SN are completed by graduation day. (A diploma, signed by the sub base commanding officer, is presented to each graduate.)

Conditioning Exercises Are Prescribed for Waves and Nurses

WAVES and Navy nurses are busily performing their version of the twist these days — and the two-way stretch, the curl and the bend and bob too — not to mention the lifter, the swan, the circulator and the jog and jump as well.

They're not indulging in a series of new dance routines, however.

The items listed above are really exercises. They're designed to maintain a state of physical condition which will further proper health and keep physical poise and good personal appearance at the level necessary for efficient and alert execution of assigned military tasks. In short, the Navy is telling its female members the same thing it told its male personnel last August — it's time to do something about keeping in good shape, and getting in better shape. You'll find the basic directive in BuPers Inst. 6100.4.

Navy women, says the instruction, will be given a sufficient interval for conditioning before they'll be expected to meet minimum standards. They are cautioned to start at a low level, and gradually work up to the highest level they can perform. Women under 40 will eventually be expected to attain at least the fourth level, while those 40 or older are encouraged to participate in a program of calisthenics.

The eight exercises do not change, but the number of each type required to be done within a given time must be increased gradually. The entire series of exercises must be performed within 15 minutes. The first two minutes are devoted to a general warm-up, and another minute of rest is allowed between the fourth and fifth exercises. A 15-second pause is permitted between warm-up and the first exercise and to change positions following each exercise.

The eight exercises are:

Bend and bob (No. 1)

Purpose — Maintains flexibility, tone and mobility; useful as a warm-up.

Starting position: Stand with feet apart, arms over head and hands together.

1. Bend forward. Touch floor between feet. (Knees may be bent).
2. Bob. Touch left foot with both hands.
3. Bob. Touch right foot with both hands.
4. Return to starting position.

Two-way stretch (No. 2)

Purpose — Maintains flexibility, tone and mobility; useful as a warm-up.

Starting position: Stand erect with feet apart and arms at side.

1. Bend from waist toward left, sliding left hand downward along leg, extending right arm over head to the left.
2. Return to starting position.
3. Repeat No. 1 in reverse (bend right).
4. Return to starting position.

Level	Stretch Warm-up Period	PHYSICAL FITNESS PROGRAM FOR NAVY WOMEN EXERCISE NUMBER								
		No. 1	No. 2	No. 3	No. 4	Rest	No. 5	No. 6	No. 7	No. 8
7		24	20	20	16		20	20	20	5
6		20	20	20	12		18	18	18	4
5		18	18	18	10		16	16	16	4
Minimum Completions		16	16	16	8		12	12	12	4
3		12	12	12	6		10	10	10	3
2		10	10	10	4		8	8	8	2
1		8	8	8	4		6	6	6	2
Minutes Each Exercise	2 min.	1 min.	1 min.	1 min.	1 min.	1 min.	1 min.	1 min.	1 min.	3 min.
		*	*	*	*		*	*	*	

*15 second intervals to change positions.

NOTE: Work up *gradually* to your best level.

Rest anytime you feel rest is necessary but total performance listed must be within 15 minutes of elapsed time.

Lifter (No. 3)

Purpose — Improves posture and trims mid-section.

Starting position: Lie on back with arms at sides and legs extended.

1. Tuck legs, pulling feet along deck toward body.
2. Push mid-section upward (body weight resting on upper back, arms and feet).
3. Return to No. 1 position.
4. Extend legs to starting position.

Curl (No. 4)

Purpose — Strengthens, trims and tones mid-section.

Starting position: Lie on back with arms extended from sides.

1. Draw knees close to chest. Keep toes pointed and hips on floor.
2. Rotate legs to right, touching right knee to floor. Keep head, shoulders and arms as stationary as possible.
3. Return to No. 1 position.
4. Return to starting position. (This counts as one completion). Repeat Numbers 1 through 4, but rotate left (one completion).

Swan (No. 5)

Purpose — Exercises the rear muscles from head to heels.

Starting position: Lie face downward with arms outstretched from sides.

1. Raise head, arms and legs. Arch back as much as possible. Keep legs and arms straight, toes pointed.
2. Return to starting position.
3. Repeat No. 1.
4. Repeat No. 2 (one completion).

Circulator (No. 6)

Purpose — Stimulates and invigorates; tones chest and arm muscles.

Starting position: On hands and knees, fingers pointing inward.

1. Lower head and trunk by bending elbows. Touch chin to left hand.
2. Return to starting position.

3. Repeat, but touch chin to right hand.
4. Return to starting position (one completion).

Twister (No. 7)

Purpose — Slenderizes waistline.

Starting position: Lie on back with legs straight, feet together and arms extended to sides, palms down.

1. Raise left leg to 90 degrees.
2. Swing leg over body, try to touch right hand.
3. Return to No. 1 position.
4. Return to starting position (one completion).
5. Repeat, using right leg and left hand.

Jog and Jump (No. 8)

Purpose — Conditions circulatory and respiratory systems, and exercises major muscles in the extremities.

Starting position: Stand tall with head up, chest out, and shoulders back.

1. Jog in place, starting with left foot. Each time left foot touches counts as one time. Repeat for total of 16 times.
2. Jump to "side stride" (spread-eagle), position four times.
3. Repeat No. 1.
4. Repeat No. 2 (one completion).

Incidentally, Navy wives may want to try these exercises too.

Seven Correspondence Courses Added, Four Discontinued

Six new enlisted correspondence courses (ECC) and one officer correspondence course (OCC) are available from the Correspondence Course Center, Scotia, N. Y. One officer and three enlisted courses have been discontinued.

The new courses are:

Course	NavPers Number
*ECC Radarman 3 and 2, Vol. 2	91269
*ECC Signalman 1 and Chief	91292
*ECC Sonarman "G" 3 and 2	91261
ECC Aerographer's Mate 1 and Chief, Vol. I	91602
ECC Tradevman 1 and Chief	91699
ECC Aviation Fire Control Technician 2	91634-1
OCC Duty Afloat for Engineering Specialists	10941-A

The asterisks indicate courses classified as Confidential — Modified Handling Authorized.

Correspondence courses discontinued are *OCC Duty Afloat for Engineering Specialists* (NavPers 10941), *ECC Sonarman 3 and 2*, Vol. I (NavPers 91260-2A), *ECC Aerographer's Mate Chief* (NavPers 91646 and *ECC Aerographer's Mate 1* (NavPers 91643-A).

Enlisted correspondence courses will be administered (with some exceptions) by your local command.

If you are an EM on active duty, your division officer will advise you whether the course for which you have applied is suitable to your rate.

Here's the 1962 All-Navy Sports Program

You may be up to your eyeballs in snow right now, but it's later than you think, and spring (we trust) is just around the corner. Besides, inside a warm gymnasium or bowling alley, who cares if it snows?

All of this is by way of introduction to announcement of the 1962 All-Navy Sports Program — a six-month long, seven-sport slate designed to give most Navy sportsmen, and sportswomen, something to shoot for.

BuPers Inst. 1710.1G, which announces the 1962 schedule, emphasizes once again that participation in All-Navy championship-level competition is intended as a natural outgrowth of extensive intramural and intermural participation. Under such a setup, as competition advances through base-level, district and/or fleet force and regional eliminations to the All-Navy play-offs, every Navyman and Navywoman has a chance to go just as far as his or her particular skill and desire will permit.

Squad size includes officer in charge, coach and/or manager unless otherwise specified.

Golfers will be pleased to learn that nominations for All-Navy play must reach the Bureau no later than 15 July this year, providing them with an extensive break between district and regional play and the All-Navy tourney.

Regional coordinators for the upcoming play are:

- Atlantic Fleet Region — COMSERVLANT
- North Atlantic Region — Potomac River Naval Command
- South Atlantic Region — COMFIVE
- Pacific Coast Region — COMELEVEN
- Western Pacific Region — COMFOURTEEN

Inter-service competition, with dates, will be announced at a later date.

The 1962 schedule:

Sport	Rules	Type of Tournament	Squad Size	Date	Location
Basketball	AAU	Double Elimination	12	5-9 Mar	Norfolk
Boxing	AAU and Headgear	Single Elimination	One each weight, OinC and coach	4-6 Apr	Norfolk
Volleyball	USVBA	Double Elimination Best of three	10	11-14 Apr	NAS Alameda
Bowling (Men and Women)	ABC	18 games (Six games per day)	4 men 4 women	16-18 May	SubBase Pearl Harbor
Tennis (Men and Women)	USLTA	Single Elimination Open—Best two Semi-Finals—Best three Seniors and women—Best two	4 open 2 senior 3 women	7-10 Aug	Newport
Golf (Men and Women)	USGA	72-hole Medal	4 open 2 senior 3 women	21-24 Aug	San Diego
Softball	ASA	Double Elimination	16	12-15 Sep	Seattle

List of New Motion Pictures and TV Series Available to Ships and Overseas Bases

The latest list of 16-mm feature movies and TV series available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Two one-hour TV shows are packaged together for a 108-minute program, but may be shown only aboard ship. TV series available for selection are: *Rawhide, Stagecoach West* and *Wagon Train* — Westerns; *Perry Mason, Michael Shayne* and *The Untouchables* — Melodramas.

Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

Motion Pictures

Love in a Goldfish Bowl (1839) (C) (WS): Comedy; Tommy Sands, Fabian.

Scream of Fear (1840): Melodrama; Susan Strasberg, Ronald Lewis.

Blood and Roses (1841). (C) (WS): Melodrama; Mel Ferrer, Elsa Martinelli.

Man in the Moon (1842): Comedy; Kenneth More, Shirley Anne Field.

House of Fright (1843) (C) (WS): Drama; Paul Massie, Dawn Addams.

Thief of Baghdad (1844) (C) (WS): Fantasy; Steve Reeves, Georgia Moll.

Loss of Innocence (1845) (C): Drama; Kenneth More, Danielle Darrieux.

Double Bunk (1846): Comedy; Ian Carmichael, Janette Scott.

The Deadly Companions (1847) (C) (WS): Drama; Maureen O'Hara, Brian Keith.

Marines, Let's Go (1848) (C) (WS): Comedy; Tom Tryon, David Hedison.

Valley of the Dragons (1849): Melodrama; Cesare Danova, Sean McGlory.

Claudelle Inglish (1850): Drama; Diane McBain, Arthur Kennedy.

Francis of Assisi (1851) (C) (WS): Drama; Bradford Dillman, Dolores Hart.

Queen of Pirates (1852) (WS): Melodrama; Gianna Maria Canale, Massimo Scilla.

Pirates of Tortuga (1853) (WS): Melodrama; Ken Scott, Leticia Roman.

Carry on Constable (1854); Comedy; Sidney James, Kenneth Connor.

Television Programs

5212: TV-1 *Wagon Train* — The Odyssey of Flint McCullough. TV-2 *Stagecoach West* — The Guardian Angels.

5213: TV-1 *Wagon Train*—The Beth Pearson Story. TV-2 *Stagecoach West* — Blind Man's Bluff.

5214: TV-1 *Rawhide*—Murder Steer. TV-2 *Michael Shayne* — No Shroud for Shayne.

5215: TV-1 *Perry Mason* — Paul Drake's Dilemma. TV-2 *Stagecoach West* — The Raider.

5216: TV-1 *Perry Mason* — Dubious Bridegroom. TV-2 *Stagecoach West* — The Orphans.

5217: TV-1 *Perry Mason* — Lucky Legs. TV-2 *Stagecoach West* — A Time to Run.

5218: TV-1 *Perry Mason* — Jilted Jockey. TV-2 *Stagecoach West* — Finn McCool.

5219 — TV-1 *Untouchables*—The Seventh Vote. TV-2 *Rawhide* — Superstition Prairie.

5220: TV-1 *Untouchables*—Death for Sale. TV-2 *Rawhide* — Buffalo Soldier.

5221: TV-1 *Untouchables*—The Nick Acropolis Story. TV-2 *Rawhide* — Incident Before Black Pass.

5222: TV-1 *Untouchables* — The Champagne Story. TV-2 *Rawhide* — Running Man.

5223: TV-1 *Untouchables* — Ring of Terror. TV-2 *Rawhide* — Phantom Bugler.

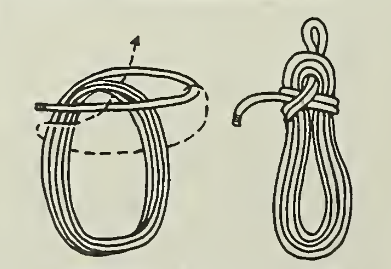
5224: TV-1 *Untouchables* — The 90 Proof Dame. TV-2 *Rawhide* — New Start.

5225: TV-1 *Untouchables* — Strangle Hold. TV-2 *Rawhide* — Painted Lady.

5226: TV-1 *Untouchables*—The Nero Rankin Story. TV-2 *Rawhide* — Broken Word.

5227: TV-1 *Perry Mason* — Purple Woman. TV-2 *Stagecoach West* — Object Patrimony.

Grains of Salt—



SECURING A COIL OF LINE FOR ACTIVE STORAGE

New AFIE Catalog Lists Publications and Films Available to Naval Units

New sources of information and education available to Navymen via publications, posters and motion pictures are listed in the revised *Catalog of Information Materials* (DOD Pam 8-5/NavPers 92140C) published by the Armed Forces Information and Education Headquarters.

The publications listed in the new catalog include such items as illustrated pocket guides for overseas orientation, pamphlets to inform servicemen of the ideals and goals of the United States government and material explaining matters of personal concern to members of the armed forces.

Most of the posters are 18 by 25½ inches in size. They are produced both individually and in series. Kits for assembling wall or table displays larger than the standard size are also listed.

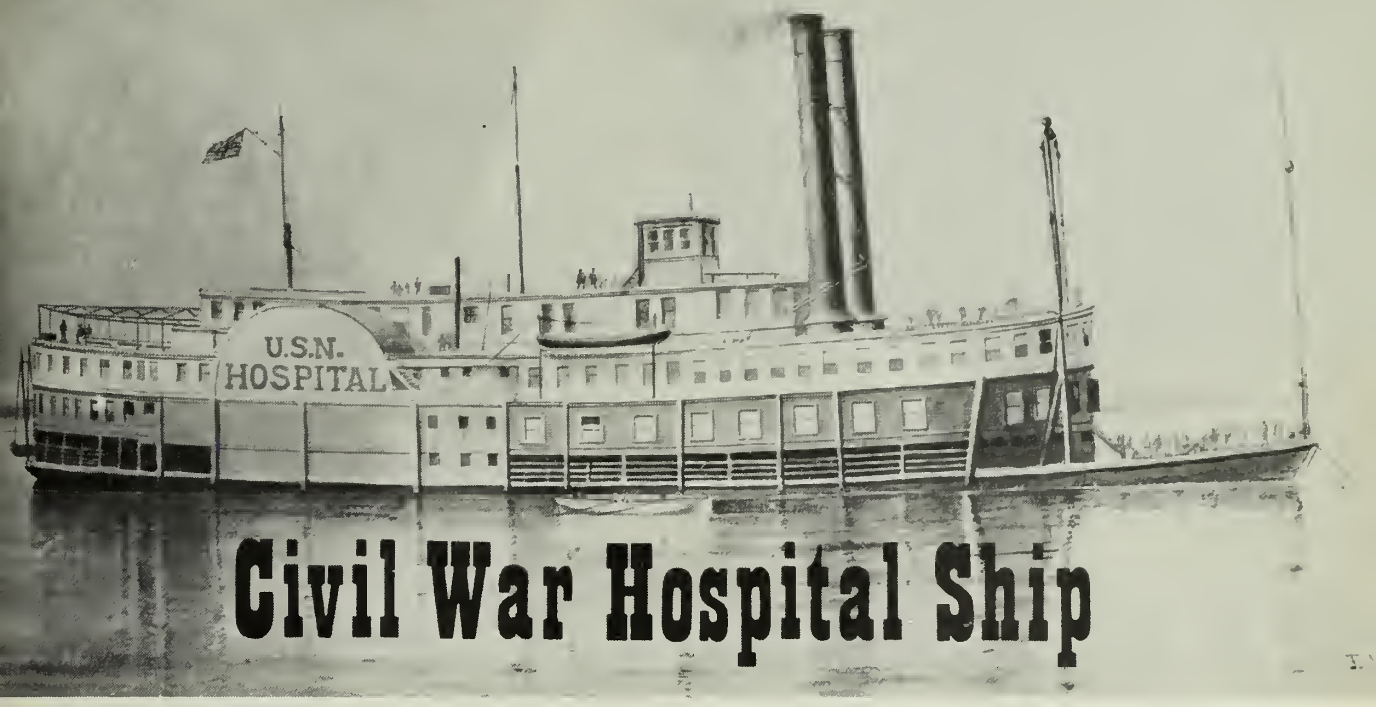
There are three principal kinds of motion pictures listed: Armed Forces Information Films (AFIFs) on a wide variety of subjects, including communism, democratic institutions and overseas orientation; I and E Screen Magazines (I&ESMs) —two-reelers released monthly to supplement shipboard and base theatre entertainment programs; and films on world affairs (WAs) — film-recorded discussions of world problems by prominent authorities.

The catalog also includes information on radio and television material for armed forces use and transcriptions obtainable for distribution to military outlets and veterans hospitals.

Most of the material listed in the catalog is automatically made available to naval activities. Publications not available locally may be requisitioned from the Naval Supply Centers at Norfolk, Va., and Oakland, Calif. Posters are stocked by the Naval Supply Depot, Philadelphia, Pa.

Any material that is not stocked by the Navy can be requisitioned from the U. S. Armed Forces Institute, Madison 3, Wis., while the supply lasts.

Specific instructions for obtaining these materials are in the *Navy's I & E Catalog* (NavPers 15801-1).



Civil War Hospital Ship

One of the marks of growing civilization, they say, is the increase in the care of a community's sick, wounded and helpless. *Red Rover*, the first of the U. S. Navy's hospital ships, was such a mark. Here is the story of her career during the Civil War.

THE FIRST HOSPITAL SHIP of the United States Navy was originally the commercial side-wheel river steamer *Red Rover,* built at Cape Girardeau, Mo., in 1859. She was purchased at New Orleans, La., on 7 Nov 1861 by the Confederate States of America to serve as a barracks or "accommodation ship" for the Confederates' floating battery *New Orleans.*

In their first joint action, the two ships made their way up the Mississippi River as far as Island No. 10, a strategic battle position, where they assisted in the blockade of the Western Gunboat Flotilla of the Union Army. On 15 Mar 1862, Island No. 10 saw the commencement of a naval bombardment by the Union Army. Though *New Orleans* was jarred by the explosions of shells under and around her, she was unharmed. *Red Rover,* however, was put out of action early in the bombardment by a piece of shell which cut through all her decks to her bottom and caused her to leak considerably but not dangerously. Abandoned as a quarters ship, she was moored on the opposite side of Island No. 10, and was captured by the Federal gunboat *Mound City* when that island fell into Union hands on 7 April.

Volunteer Acting Master Cyrenius Deminey (or Dominy), of *Mound City,* made the actual capture. (He later distinguished himself by capture of the Confederate Steamer *Clara Dolson* in the White River, and was on the upper deck and escaped death by scalding when the boilers of *Mound City* were exploded by a Confederate shell in June 1862. He saved many of the men of his gunboat on that occasion, although two were shot as he hauled them back on board from the water.)

RED ROVER was repaired and floated upriver to St. Louis, Mo., where she was fitted out by the Federal forces as a floating summer hospital for the Western Flotilla.

George H. Bixby became the senior medical officer of the floating hospital and remained the senior medical officer of *Red Rover* throughout the Civil War. He was assisted by another medical doctor from his hometown of Boston, Doctor George H. Hopkins, and other surgeons.

When *Red Rover* reported for duty on 10 Jun 1862, she had stores aboard for her crew for three months and medical supplies sufficient for 200 men for three months. She was also abundantly supplied with special items for the sick, and had on board 300 tons of ice. The boat was supplied with everything known at the time to be necessary for the restoration to health of sick and disabled seamen.

Commented Quartermaster Wise from the Office of the Naval Depot at Cairo, Ill.: "I wish you could see our hospital boat, the *Red Rover,* with all her comforts for the sick and disabled seamen. She is designed to be the most complete thing of the kind that ever floated, and is every way a decided success. The Western Sanitary Association gave us articles costing $3,500. The ice box holds 300 tons. She has bathrooms, laundry, elevator for the sick from the lower to upper deck, amputating room, nine different water closets, gauze blinds to the windows to keep the

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Based upon the official ship's history, made available through the courtesy of the Ships' Histories Section, Naval History Division, Office of the Chief of Naval Operations.

EXCHANGING SHOTS—Union gunboats and mortar boats bombard Confederate batteries on island.

cinders and smoke from annoying the sick, two separate kitchens for sick and well, a regular corps of nurses, and two water closets on every deck."

THE HOSPITAL SHIP *Red Rover* received her first patient on 11 Jun 1862 — Seaman David Sans, who was a cholera victim from the gunboat *Benton*. Four other patients were received that day, 13 on the 12th, and 38 patients were received from ships of the Western Flotilla on the 13th.

Her great benefit to the Western Flotilla was described by Flag Officer Charles H. Davis: "No one can comprehend the sufferings to which our sick have been exposed by the absence of proper accommodations on board the gunboats, and by the necessity for frequent and sometimes hasty change of place. The wounded and patients suffering from fever occupy, under the direction of the surgeon, those parts of the ship which are most quiet and best ventilated.

"When the ship is cleared for action, as often happened when lying near Fort Pillow, (Tenn.), it is necessary to take down the patients' cots and hammocks and move them into out-of-the-way and uncomfortable places. This is almost always attended with pain and distress, if not positive injury. The arrival of *Red Rover* will put a stop to all this. . . . All the conveniences and appliances of a hospital are fully provided, and to these are added the neatness and order essential to so large an establishment."

Though certain steamers, including *City of Memphis,* had been pressed into service as hospital transports, they lacked accommodations, cleanliness and the medical staff made possible by the new ship.

ON 17 JUN 1862, the Federal gunboat *Mound City,* which had captured *Red Rover,* took part in the attack on the White River which resulted in the capture of the Confederate forts at St. Charles, Ark.

During the action, a shell from the Confederate batteries penetrated the port casement of *Mound City,* killing three men in its flight, and exploded her steam drum. Eight men were scalded to death and 43 were either drowned or shot after leaping overboard.

The total casualties were 135 out of a total of 175 men on board. Thirty-seven were transferred to *Red Rover* for transportation to hospitals in Illinois.

Red Rover arrived off Mound City on the 26th and put off all but two of the scalded, several other patients and two prisoners of war. Among those transferred ashore was Commander Kilty, commander of the gunboat expedition and of *Mound City*. He had been badly injured by the steam of the exploding boiler.

Red Rover then joined the Western Flotilla above Vicksburg, Miss. In the early morning darkness of 15 Jul 1862, the ships of the Western Flotilla entered the Yazoo River and headed upstream. The gunboats prepared for action when the powerful Confederate ram and ironclad *Arkansas* was discovered coming from the opposite direction. She succeeded in passing the entire Western Flotilla and the Ram Fleet, leaving many Union casualties in her wake.

These men were treated by *Red Rover,* which remained on the scene to take care of casualties of Southern guns and of the climate of the Mississippi Valley while the Flotilla and Ram Fleet engaged the enemy opposite Vicksburg. She later gave similar support to the combined fleets during operations off Helena, Ark. While off that city she had the misfortune to catch fire, and all the boats from the gunboat *Benton* were required to assist in putting it out.

IN SEPTEMBER 1862 an Illinois Prize Court, having jurisdiction over *Red Rover* as a prize of war, sold her to the Navy for $9314.28. She was then transferred to the U. S. Naval Depot at Cairo to be fitted out for winter service, having brought 80 sick, one-half of whom were broken down by disease and unfit for further service.

According to the medical journal of the hospital ship, she had admitted a total of 374 patients by the end of 1862. Of these, 332 were discharged as hospital patients, 37 died and five deserted. Whole number of sick days for patients subsisted amounted to 9842 days. Her total expenses for the year were listed at $3462.79.

Although crowded conditions of shore hospitals put her in service while she was still fitting out for winter, *Red Rover* was not commissioned in the U. S. Navy until 26 Dec 1862. She was under command of Acting Master William R. Wells, USN, who was included in the crew numbering 12 officers and 35 enlisted men. Before long, there were also about 30 persons "not shipped" on board and employed in the medical department. Four of this number were Sisters of the Order of the Holy Cross.

On Christmas Eve 1862, Sister Veronica, Sister Adela and Sister Callista came on board for duty which would see the first two Sisters tending the sick on the hospital ship for the duration of the war. On 9 Feb 1863 they were joined by Sister M. John of the Cross (carried on reports as Sister St. John), who served as a nurse until 30 Sep 1863. Five Negro women worked under the direction of the Sisters.

These women may be said to be the pioneers or forerunners of the U. S. Navy Nurse Corps, as they were the first women nurses carried on board a U. S. Navy hospital ship. In addition to the nurses, there were several laundresses employed in the hospital department of the ship. The total number of employees, including men, varied from the peak of about 40 in the busiest times to as few as eight.

On 29 DEC 1862, *Red Rover* headed downriver from Mound City. Two days later she moved on from Helena, Ark., in the convoy of gunboats *Lancaster* and *Tigress*. It was exactly midnight when *Red Rover,* with her one 32-pounder loaded with grape and all hands at quarters, passed Bolivar, Miss. She escaped the notice of Confederate shore guns and, when *Lancaster* found it necessary to stop to take wood aboard, *Red Rover* decided to make her run without a convoy.

She made the mouth of the Yazoo River, where she received orders to proceed upstream to USS *Black Hawk,* flagship of the Mississippi Squadron, 10 miles up the river. The next day *Red Rover* returned to the mouth of the Yazoo, where transports came down with troops, and anchored under the Louisiana shore.

In company with *Black Hawk,* she anchored at the mouth of the White River, remaining there on guard with the ordnance ship *Judge Torrence* while the Mississippi Squadron stood up the White River. The light flotilla led by *Rattler* was followed by Admiral Porter's *Black Hawk.* Next came the ironclad flotilla and the transports with the gunboat *Lexington* bringing up the rear.

Admiral Porter had assigned *Red Rover* and *Judge Torrence* the task of guarding the mouth of the White River and the coal barges, and notifying any light draft gunboats and all coal or store-boats to stop at the mouth of the White River until further orders. His fleet conducted a naval bombardment, followed by an assault by the Army, which carried the Post of Arkansas (Fort Hindman) on 11 Jan 1863.

THE NAVAL BOMBARDMENT ended at 6 pm, and *Signal* made her way back down the White River to transfer the wounded *to Red Rover* and to receive ice and fresh beef. The gunboat *New Era* also arrived with wounded and was given the same service.

Red Rover left the mouth of the White River, and was mooring in company with the flagship about a mile below Napoleon when she was fired into by Confederates. She was struck by two shots which entered the hospital portion of the ship. However, no wounded were reported as a consequence.

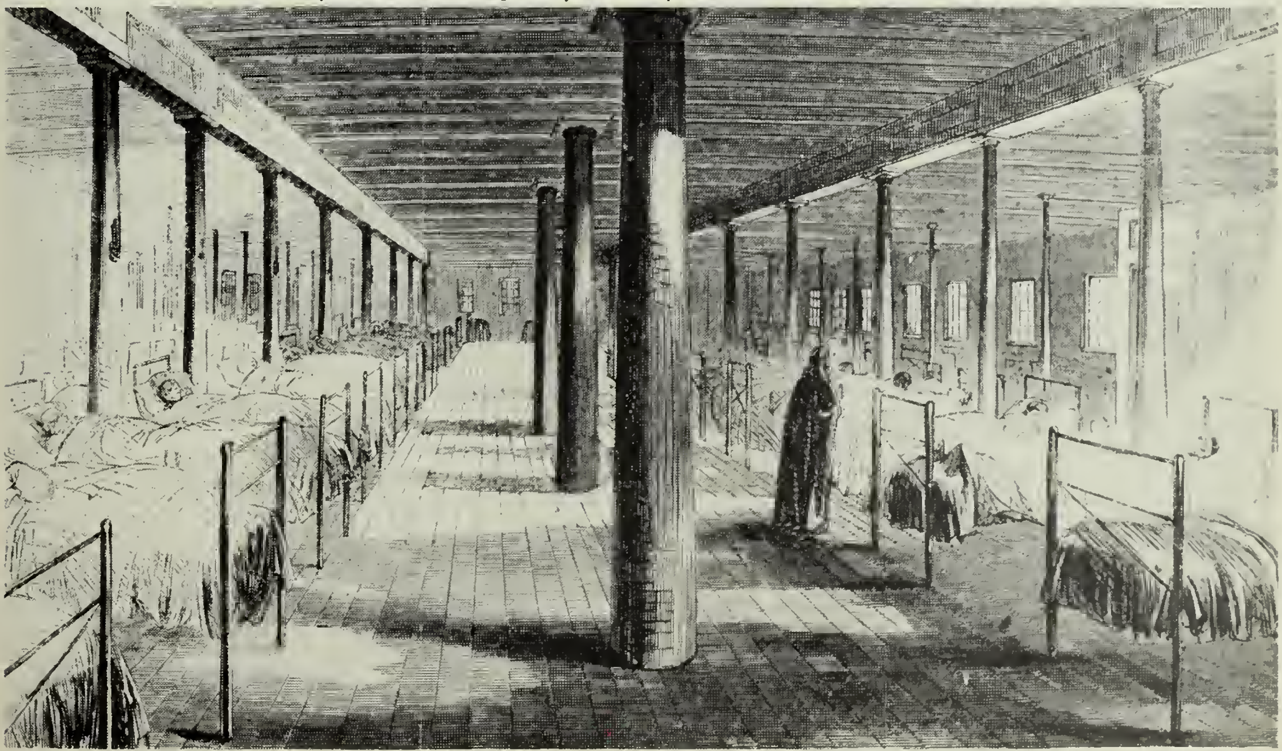
She returned the fire with her muskets and moved four miles away to spend the night. She returned to the mouth of the Yazoo River two days later, and continued to care for the sick and wounded of the Mississippi Squadron as it supported the Army expedition to gain control of the Yazoo and the tributary rivers which made it possible for the Confederate forces at Vicksburg to obtain supplies.

The Confederate defenses of Vicksburg were intended to be able to repulse any force—naval, military, or both combined—which could be brought against them. This made the problems of the Federal siege formidable, and the Southern defenses seemed for a time to defy all attempts at their reduction.

Meanwhile, in December 1862, Fleet Surgeon Ninian A. Pinkney had relieved Fleet Surgeon Edward Gilchrist. He made the *Red Rover* his headquarters ship, and from her flowed the orders, correspondence, pleas and action of this remarkable man as he tried to overcome the many difficulties and problems obstructing the care and interest of the Navy sick and wounded of the Mississippi Squadron.

To the Chief of the Bureau of Medicine and Surgery went recommendations for organization and standard instructions to surgeons of the squadron. He pressed upon the bureau the need of supplying all the ironclads with medical officers and the light-draft ships with surgeon stewards, so that these fighting ships on frequent detached duty could properly care for their sick and wounded until they reached

THE WARD — As the Navy's first floating hospital ship *USS Red Rover* offered relief for the wounded.



RED RIVER DAM — As the water level is raised, the first gunboat, *Lexington,* passes the rapids.

Red Rover or shore hospitals. No opportunity of improving the service seemed to escape his attention.

WHILE RED ROVER watched over the sick and wounded above Vicksburg in the winter of 1862-63, additional disabled accumulated along the rivers without means of providing for them. Memphis was the most central point, as well as the most healthy place on the Mississippi River, so permission was requested for the Navy to occupy suitable buildings at Memphis for hospital purposes.

General Grant promptly ordered that a former Confederate building be turned over to Fleet Surgeon Pinkney. As all hospital buildings, save for the Mound City Hotel, were in the possession of the Army, and those being full to overflowing, there was little possibility of accommodating the Navy sick without scattering them all over the country, removing some at the risk of their lives.

Thus, the Commercial Hotel of Memphis was converted to hospital use by the Navy. The hotel was soon providing shelter to 248 men. It was named Hospital Pinkney in honor of the fleet surgeon. Sister St. John left the *Red Rover* at the end of September to take charge of the nursing there.

Back downriver, firing could often be heard from the vicinity of Vicksburg as *Red Rover* received the wounded and sick from the various ships of the squadron. From her station at the mouth of the Yazoo, she often ran 30 miles up the river to obtain eggs, chickens, milk and similar supplies from Harrison's Plantation. These fresh provisions were for the use of the hospital department. Her crew was kept busy with many duties. They packed fresh beef in ice, built cattle corrals on shore for the livestock eventually destined for meat supply; buried the dead; took aboard stores and provisions; and off-loaded medical supplies, provisions and stores to ships of the squadron.

ON 16 APR 1863, *Red Rover* weighed anchor and proceeded down the Mississippi as far as the lower fleet of transports, where she landed on the Louisiana shore just above Vicksburg. Now the gunboats and transports passed by with the intention of running the blockade past Vicksburg. They rounded the point near 11 pm and enemy musketry opened up.

Soon Confederate heavy guns spoke out as fires were lighted on shore to illuminate the passing squadron. The gunboats dueled the batteries and the town as they swept ahead at full speed and succeeded in breaking through the blockade. Before the Federal siege ended, some 16,000 shells would be thrown from mortars, gunboats and naval batteries upon Vicksburg and its defenses.

Moving from the scenes of combat, *Red Rover,* overflowing with patients, arrived at Memphis on 23 Apr 1863. There, she transferred her most serious cases to Hospital Pinkney preparatory to repairs in the Navy Yard. Her repairs were completed by 20 May, when she received 11 men from Hospital Pinkney as crew. She then moved down to the Yazoo River, where she continued to receive, treat and evacuate the wounded of the fleet on western waters as it destroyed everything of value along the Yazoo River and brought greater pressure to bear on Vicksburg.

That Confederate stronghold fell on 4 Jul 1863, and *Red Rover* arrived at Memphis on 14 July with casualties of the successful Army-Navy siege. From there, she proceeded downriver to the Jefferson Davis plantation and transferred medicine to gunboat *Carondolet,* thence to Grand Gulf, Miss., where she delivered medical supplies to the gunboat *Louisville.* Continuing on downriver, she visited Natchez, Baton Rouge and New Orleans, then proceeded back upriver by way of the various fleet rendezvous to Memphis, where she arrived on 15 Aug.

Red Rover remained at Memphis for more than two months, when she returned to Mound City for extensive repairs. These completed in March 1864, she resumed her, by now, familiar routine.

RED ROVER arrived some time later, and took all the wounded still in the vicinity for care in the hospitals. She got her gun ready for action and prepared for an expected attack from the guns of Fort Randolph as she headed back upriver, but she passed that fort without incident. After arrival at Memphis, she started back downriver the next day, putting off medical stores and supplies to ships.

Red Rover came off the mouth of the Red River on 17 Apr 1864 to support the fleet cooperating with the Army in the expedition. Upon reaching Springfield, the gunboats found that Union land forces were falling back towards Grand Ecore, La. They were obliged to return downriver, as they had no infantry to dislodge the Confederate batteries which could be mounted on the river banks. On the return voyage they were constantly taken under fire at every assailable point.

Upon reaching Grand Ecore, the gunboats found that the Red River had fallen so low that they could not pass over the rapids. It seemed that the better part of the squadron would be doomed to destruction as the Union Army prepared to evacuate that place.

However, Lieutenant Colonel Joseph Bailey, acting engineer of the 19th Army Corps, proposed a plan for building a series of dams across the rocks of the falls, thus raising the level of the river. Constructed by Army-Navy men, the dam had a center opening which let the ships ride out on the crest of the water. After a few days, the gunboat *Lexington* passed into deep water, followed by the rest of the fleet.

MEANTIME, *Red Rover,* stationed at the mouth of the Red River, delivered medical supplies, ice, provisions and stores to ships of the fleet as she admitted their sick and wounded to her hospital department.

By June 1864 the Mississippi Squadron had increased to about 100 ships, carrying some 460 guns, with crews amounting in the aggregate to about 5500 men. Kentucky, Tennessee and Arkansas, the upper portions of the states of Mississippi and Louisiana, and the southern portions of those states which bordered the Ohio River on the north, had been captured.

To patrol the Mississippi River from Cairo to New Orleans was a great task whereby Confederate combinations were broken and their organization severed. Similar patrols were conducted in the Ohio, Tennessee and Cumberland Rivers. Waters traversed by ships of the squadron were eventually divided into 10 naval districts. While the ships in each district had appropriate fields of duty, they were ready to support each other if emergency arose.

Red Rover was not assigned to any particular district. In addition to her service as a hospital ship to the squadron, she acted as a medical provisions and supply ship, moving down and up the river between Cairo and New Orleans, receiving the sick from ships on station and delivering medical stores and supplies.

RED ROVER commenced her last medical supply voyage from Memphis on 24 Oct 1864. She delivered medical stores to ships at Helena, White River and Red River, thence again to the mouth of the Yazoo and back to Memphis, where she transferred the sick of the squadron to Hospital Pinkney. She reached Mound City on 11 Dec 1864. This was her location to the end of her career.

As the Civil War drew to a close, the light-draft ironclads of the Mississippi Squadron were detached for service in Mobile Bay, where the Confederate naval forces in Alabama waters formally surrendered on 10 May 1865. This marked the end of an organized Confederate Navy, which was dealt the final blow with the fall of three forts at Sabine Pass and Galveston, Tex.

Red Rover continued to care for Navy patients until 17 Nov 1865, when her 11 remaining patients were transferred to the steamer *Grampus.* During her career she had admitted 2497 patients. Her last record of those employed in her medical department is dated 30 Apr 1865. Sister Veronica and Sister Adela were still on board, and it is presumed they remained to her last day of service. Dr. George Bixby was honorably discharged from the Navy on 26 Sep 1865. He resumed his medical practice in Boston, where he engaged in research and wrote numerous articles.

Throughout the career of *Red Rover,* she had an average crew of 40 men and about an equal number employed in her hospital department. In addition to the women nurses, there were men to care for the sick. Some of these were convalescent sailors and soldiers detailed to duty from shore hospitals.

Stripped of her gun and iron-plate, *Red Rover* was sold at public auction for $4500 on 29 Nov 1865. Since the passing of *Red Rover,* many passenger liners have been converted to hospital ships, each one an improvement over her predecessors. USS *Relief* (AH 1) was the first ship of the U. S. Navy to be designed and constructed solely for hospital purposes.

Red Rover was a wooden, side-wheel steamer displacing 786 tons and drawing eight feet of water. The dimensions of her hull are unknown. Her maximum upstream speed was nine knots. Her average speed was five knots, and her crew numbered 42 officers and men.

That's not much when compared to the modern hospital ship, but *Red Rover* marked a significant step forward in the care of the battle wounded.

JUST AFTER CHANGING HANDS — Partly visible at the left is *USS Mound City,* which captured *Red Rover.*

TAFFRAIL TALK

SING A SONG of Seavey, a pocket-full of preferences. Or, the story behind one ex-Pacific Fleet Navyman's recent assignment to shore duty.

Seavey officials in the Bureau could easily have been pardoned for suspecting some sort of a rib when the name of Robert E. Seavey, QM1, USN, turned up on a list of names due for shore duty not so long ago.

It was no joke though. QM1 Seavey, it developed, was serving on board the MINPAC ocean minesweeper USS *Engage* (MSO 433) – and he was on the Seavey list for shore duty.

So how did it all turn out?

Well, the Seavey people discovered, Seavey stood 11th on the Seavey list among QM1s, on the basis of seniority. And one of his duty preferences, as he had expressed it on his Seavey card, was for "anywhere west of the Mississippi." It was determined, moreover, that there was an opening for a QM1 in the Eighth Naval District. The 10 QM1s senior to Seavey on the Seavey list had indicated no preference for duty within 8ND. Seavey got the billet.

And what can we learn from all this? It points out, just about as well as any example can, the wisdom of indicating a broad duty preference area to give Seavey detailers some room to work in, if it is at all possible. When duty preferences are limited to specific areas, and a need arises other than in areas requested, it frequently becomes necessary to assign junior men on the list to meet the requirement. Thus, in Robert Seavey's case, his preference for duty anywhere west of the Mississippi resulted in his transfer ashore ahead of 10 QM1s senior to him, where he would undoubtedly have spent considerably more time at sea if he had held out for a specific area.

Or, as the Seavey people summed it up: "The Seavey preferences of Seavey speeded Seavey's Seavey assignment without violation of Seavey integrity, notwithstanding Seavey's standing on the Seavey relative to other Seavey eligible personnel awaiting Seavey assignment from the Seavey waiting list."

★ ★ ★

Shorvey, as well as Seavey, continues to work its daily machinations. Latest to run into its clutches is SN Jim Krause, USNR, whitehat artist in our Art and Layout Department for the past year. Jim packed his brushes and dry wit off to Norfolk this month for a tour of sea duty aboard the heavy cruiser USS *Newport News* (CA 148).

Reporting in, with easel at the ready, to replace Krause, meanwhile, was SA David Schluenz, USNR, a Davenport, Iowa, native who combined attendance at the Art Institute of Chicago with membership in a Naval Reserve Submarine Division in the Windy City in his most recent past. He shipped in for a tour of active duty last December.

★ ★ ★

This, it appears, is "names make news" month. We take note, therefore, of a recent shipping-over ceremony aboard the Pacific Fleet seaplane tender USS *Pine Island* (AV 12), wherein a brand-new RM3, John Paul Jones, USN, signed up for another four years of Navy duty. He apparently just couldn't bring himself to fight it.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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• AT RIGHT—SIGHTSEEING Navymen from eight U. S. Sixth Fleet ships enjoy five-day visit to Istanbul, Turkey. Here, Fleet sailors get a close-up look at one of the many famous mosques within the city. ➧

Getting To Know You

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

MARCH 1962 Nav-Pers-O NUMBER 542

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The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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• FRONT COVER: MAN IT'S THE MOST — Pilot's-eye view shows the expanse of flight deck of the world's largest ship, the nuclear-powered USS *Enterprise* (CVAN 65), as she readies to head out to sea.

• AT LEFT: SALT-WATER SHOWER — A task group destroyer refuels in heavy seas alongside antisubmarine carrier USS *Bennington* (CVS 20) during Operation Sea Shell, showing seamanship is still important in today's Navy.

• CREDITS: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

CB D-DAY — Seabees offload equipment on beach. *Below:* Crane hoists supplies at San Clemente, Calif.

'CAN DO

The Seabees are celebrating their 20th anniversary this month. And, as usual, the "Can Do" battalions have been very busy on construction projects and training programs. Here's a typical example of what one unit has been doing to keep in top-notch condition.

REMEMBER THOSE WORLD WAR II scenes of men and equipment pouring from the ramps of landing craft and scrambling onto the beach during large scale amphibious operations? And remember the Navy's famous Seabees, who were usually among the first to land? Well, they're still doing it.

Seabees of U.S. Naval Mobile Construction Battalion Five (MCB-5) gave a good example of how it is done, in a large scale land and amphibious operation on the Pacific coast. The purpose of the exercise was to train elements of the U.S. Pacific Fleet in planning and executing a wide variety of the operations required in a general or limited war.

The Seabees were assigned two primary jobs during the training exercise. The first was to determine

BEACH PARTY—Earth scraper rolls ashore from landing craft as MCB-5 demonstrates amphibious 'Can Do'.

BATTALIONS DO IT AGAIN

how well a Naval Mobile Construction Battalion could support a U.S. Marine Corps Air Group in the field under advanced base conditions. The second was to test supplies and equipment.

The Seabee battalion was assigned the job of supporting Marine Aircraft Group 33 (MAG-33) on San Clemente Island, Calif., during Phase III of the operation. A special detachment from MCB-5 was formed to undertake the job.

The support group assisted in an amphibious landing, laid 120,000 square feet of pierced steel plank (PSP) matting, maintained and constructed beach access roads, tested three functional components (prepackaged parts of an advanced base construction camp designed for wartime use) and provided other miscellaneous construction support.

The equipment and component parts for the test operation were assembled, prepared for use and delivered to the staging area at dockside at the U.S. Naval Construction Battalion Center, Port Hueneme, Calif. – home port of the Seabees.

Most of the Seabee rolling stock (bulldozers, cranes, trucks, etc.) was pre-loaded aboard three LCUs (landing craft, utility) and then hoisted into the well deck of the landing ship dock USS *Tortuga* (LSD 26). The remainder of the rolling stock, plus the component gear and about 100 tons of PSP matting, was loaded on the superdeck of the LSD. The detachment's construction schedule was based on a plan that called for *Tortuga* to be the first ship to arrive and off-load at San Clemente Island. On the Seabees' "D" day the three LCUs and their pre-loaded cargo hit the beach in the early afternoon and were off-loaded in less than an hour.

Fighting rough seas, another LCU brought the remainder of the rolling stock ashore three hours later.

The task group commander determined that higher priority cargo should be off-loaded next.

The result was that the detachment found itself ashore with no tools, no slings to unload cargo – and – no rations for two days. Here

'INSTANT AIRFIELD'—Landing strip is set up to handle MarCorps jets.

ROAD WORK—Seabees built pioneer road in spare time. *Rt: Thor* missile shelter was used for garage.

was a situation the Seabees could conceivably have to face in an actual operation, and Seabee ingenuity worked overtime to establish a camp despite the lack of tools. Tents went up first. Work on camp lighting facilities followed, then sanitation work began. The camp was in reasonable operating condition a few days later.

Meanwhile, the Seabees continued to unload their equipment and assist the shore party in unloading MAG-33 gear and troops. Three cranes, three forklifts, three crawler tractors, five floodlight units, equipment operators and stevedores were supplied to augment the shore party. All work on the beach was completed by late evening of the third day.

High priority was also placed on several other projects during the first days on the island. Crews were busy laying some 120,000 square feet of pierced steel plank matting, to provide for a stable landing surface for Marine Corps jets, preparing a site for aircraft approach control vans and setting up an anchor for aircraft engine testing.

Work was then started on testing the functional components. A 12-by-16-foot magazine was erected. It proved to be a versatile, easily erected unit. Next a 40-by-100-foot Butler building was erected to be used for aircraft electronic equipment maintenance. Two water distillation units were installed and tested.

During their spare time on San Clemente, the Seabees built a huge vehicle shelter from a surplus missile shelter. They also built 4400 feet of pioneer road to connect ordnance installations on the island.

With the test over, preparations were started for pack-up — dismantling the camp, closing out jobs, repackaging equipment and back-loading.

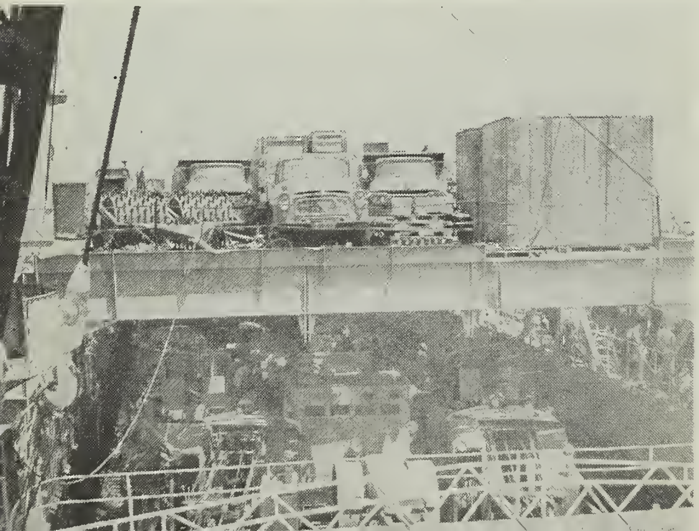
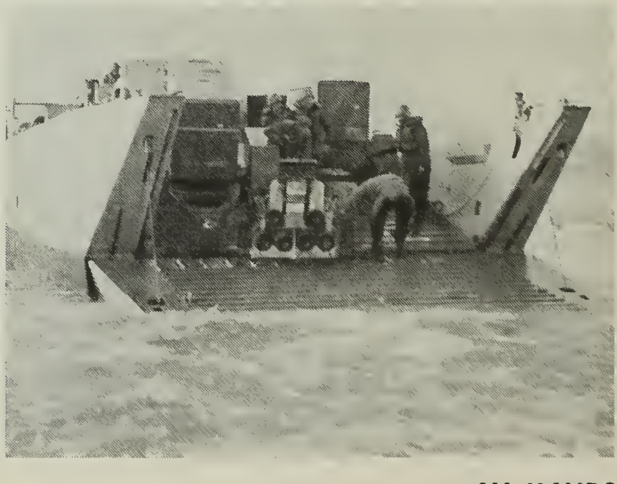
Seven ships were used for back-loading; three LSDs and four LSTs. Weather conditions were ideal, and bulk cargo loading proceeded rapidly. Seabees and their equipment once again helped load the ships. The same men and equipment involved in landing the cargo were used to load it back aboard the ships, but this time floodlights were added.

The Seabees used some 56 pieces of construction equipment and spent 2750 man-days of construction time in support of MAG-33 during Operation Greenlight. Although only a unit of the battalion participated in the exercise, all Seabee battalions benefited from the Seabees' participation, since a detailed report of the operation was compiled upon completion of the exercise. It has since been distributed to all battalions.

Thus the Seabees continue their training to be ready to support the Fleet whenever and wherever they're needed.

— Fred W. Doby, JO1, USN.

FULL 'HOUSE' — Careful planning went into loading of LSD. *Rt:* MCB-5 Navymen offload through the surf.

Missile Destroyer

ROOMY — W. C. Cathcart, RDC, enjoys spaciousness of the new lockers of *USS Towers* (DDG 9).

Air conditioning, foam-rubber mattresses and milk shakes. And on a fighting ship o' the line, yet.

First reports of such frills, you might well imagine, would be enough to set many a horny-handed inhabitant of Fiddler's Green — veteran of long watches stood at the business end of a splice bar and long nights in a hammock — to rotating fiercely on his fleecy white cloud.

Give most of those old-time sailormen a day or two aboard the guided missile destroyer USS *Towers* (DDG 9), however, and they'd be won over, but quick.

It would be obvious to all but the most barnacle-encrusted of them that *Towersmen* — and all present-day seagoing sailors — operate at a pace far exceeding the one they were called upon to set. It would be obvious, too, that modern innovations in shipboard livability make *Towers* crew members a happier, more comfortable, more alert and more efficient group than the crews which manned the coal-burners of that earlier age.

Towers, a brand-new member of Cruiser-Destroyer Force, Pacific Fleet (she was commissioned at Bremerton, Wash., in June 1961) is, pound-for-pound, one of the most potentially deadly ships ever put in the water.

She weighs a "mere" 4500 tons but, armed with such modern firepower as the *Tartar* surface-to-air missile and *Asroc,* she's equipped to take on just about anything an enemy can throw her way.

Global commitments and the continuing need for extensive and exhaustive training exercises keep *Towers* at sea a good share of the time. Her designers went all-out to provide for the comfort, well-being and morale of the 320 Navymen who sail her.

Take the air conditioning, for example. It's installed in all berthing, office and operational spaces throughout the ship. *Towersmen* call it a lifesaver in tropical water.

Television and nightly movies (with matinees on weekends and holidays) are other *Towers* features.

Off-duty readers can take advantage of one of the largest destroyer-type libraries afloat (more than 500 volumes, plus a raft of Navy training publications) — and if a *Towersman* feels like doing a little reading in his airfoam pad before corking off, he can do so by the light of his own individual reading lamp.

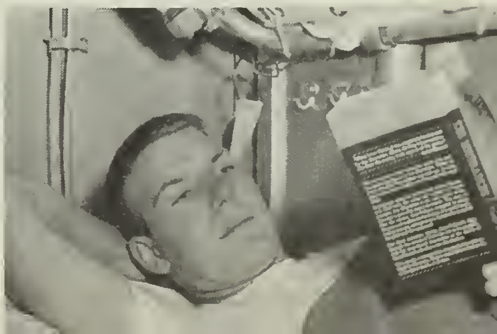
"My compliments to the chef" could be an oft-used expression aboard *Towers,* and small wonder. Commissaryman First Class Tom Klutz, USN, the major-domo of *Towers'* galley, and his helpers literally knock themselves out giving fellow shipmates the best meals available — and display a lot of imagination in the bargain.

Besides producing steak (always a big favorite) at least twice a week, the *Towers* cooks spice up the menu by whomping up such exotic offerings as Hungarian goulash, spaghetti and pizza, chili and chow mein — and frequently serve chocolate, vanilla or banana milk shakes.

San Diego-based, *Towers* is the fourth of the *Charles F. Adams* (DDG 2) class of DDGs. Some 437 feet long, and with a beam of 47 feet, her main propulsion turbines produce 70,000 shaft horsepower. A great deal of aluminum has been used in her superstructure, providing greater flexibility of design and the necessary balance for new and heavier weapons.

Besides the already-mentioned *Tartar* and *Asroc, Towers* carries two 5-inch/.54 caliber guns, two antisubmarine torpedo launchers, and an intricate electronic system coupled with radar and sonar detecting and tracking equipment.

OFF DUTY — T.B. Power, EM3, *(Top)* enjoys cool drink. *Below:* W. H. Gaff, SN, uses bunk light.



Seabees on Target

How's your "target eye?" How'd you like to draw a bead on a ringed bull's-eye target with a diameter of 1200 feet and a bull's-eye center of 20 feet? Or maybe you'd like to fire on a target some 30 feet wide and about 15 feet high. You can pick your target color, too. They come in red, yellow and white.

And if that doesn't appeal to you, how about trying to pinpoint a row of cars, strung out in a line a half-mile long, or – if that's too small – an airstrip 100 feet wide and 2900 feet long?

Sound like a giant-size shooting gallery? It is. This particular shooting gallery is located on the hard-to-pronounce Hawaiian island of Kahoolawe. Just completed by the Pacific Seabees, these and other targets were built for the U.S. Navy ships and aircraft operating out of the complex of naval and air bases located in the vicinity of Pearl Harbor, Hawaii. They're shore and aerial bombardment targets, and are part of the Multi-Purpose Live Ordnance Impact Target, Kahoolawe Island, Hawaii. A detachment of 43 enlisted men and an officer of U.S. Naval Mobile Construction Battalion Nine have completed another "Can Do" project to build the targets.

HEAVE HO—Seabee shovels concrete onto 10-foot-high shore bombardment target. Conical pile of lava was painted white.

Uninhabited Kahoolawe Island is an ideal target area. Located some 100 miles south and west of Pearl Harbor, near the islands of Maui and Lanai, the island is about six miles wide and 12 miles long. It rises from a narrow coastal plain to cliffs nearly 1500 feet high that fall almost vertically into the ocean. The island's proximity to the Navy and Marine Corps bases on nearby Oahu makes it an ideal target practice area. Ships and planes can complete firing exercises and return to Oahu the same day.

Seabees are not strangers to the island. They built targets on Kahoolawe three years ago. Since that time, however, the targets have been virtually destroyed. So the Seabees were again asked to build new targets. MCB-9 was assigned the project.

Since Kahoolawe is virtually isolated, Seabees working on the project had to take everything with them that they would need to complete the project. And they had to take enough food, supplies, repair parts, etc., to last them through the four-month construction period. Furthermore, they had to construct a small "tent city" to house them, as there are no military installations there.

Before the Seabees started work on their camp, they had to bulldoze a road from the beach up the hill to the campsite – the first of some 35 miles of roads they built while on the island.

While leveling the campsite, the Seabees ran into a hazard they were to encounter during their entire stay at Kahoolawe – unexploded ammunition. This had been provided for in advanced planning. Demolition experts from Explosive Ordnance Disposal Unit One (EODU-1) took care of these problems.

One incident demonstrated the constant need for caution. Bulldozers working near the campsite unearthed a 500-pound bomb. EODU personnel suggested that the Seabees evacuate the area until the bomb was exploded. Their foresight probably prevented an accident. A piece of shrapnel slammed through

HOUSING—Reinforced blockhouse was built as observation post. *Rt:* Mess tent is erected at campsite.

the side of one tent and was found embedded in a plywood panel where a Seabee had been working a short time before.

As the Seabees went about their work, heavy traffic soon reduced the dirt roads to such a state that vehicles could travel only a few miles per hour between the construction sites. Some of them were six miles apart, and the trip took over two hours.

A thick layer of red dust covered the roads after they had been in use a short time. The dust clung to the body and clothing and created maintenance problems with equipment. Men would return from a day in the field, completely covered with a thick coating of dust. Many wore water-soaked handkerchiefs over their mouths to help filter out the heavy dust.

But the Seabees went on with their work of building targets. The shipboard shore bombardment targets were huge piles of volcanic rock held together with cement. About 275 sacks of cement were used to build each conical target. They were about 30 feet in diameter and 12 to 16 feet high. Six of these targets were built.

The stones were washed to remove dirt and mud, then painted yellow, blue or white. This increased their visibility from the sea. In addition, glass beads were sprinkled over the freshly painted surface of each target to increase its reflective quality.

Next, seven air bombardment targets were built to resemble huge bull's-eyes. The center of each target was a pile of rock 30 feet wide and about two feet thick. The outer ring of stones was 70 feet in diameter.

Another target project was the construction of a simulated airstrip. Primarily a fill-in project at the beginning, the airfield developed into a major project.

The strip was about 2900 feet long and 100 feet wide. A large rise in the middle of the strip, which would have created hazards to low-flying strafing planes utilizing the target, had to be removed. It meant cutting a 100-foot wide path some 700 feet long, and seven feet deep at some points. They lined the runway with old clothes lockers and oil drums. These were painted with white reflector paint.

One of the easiest targets to build was the "vehicle convoy." Old cars were brought to the island by barge. They were hauled to the target site some seven miles from the Seabee camp. Then they were placed in a row to resemble a convoy. As a final touch they were painted a dazzling white.

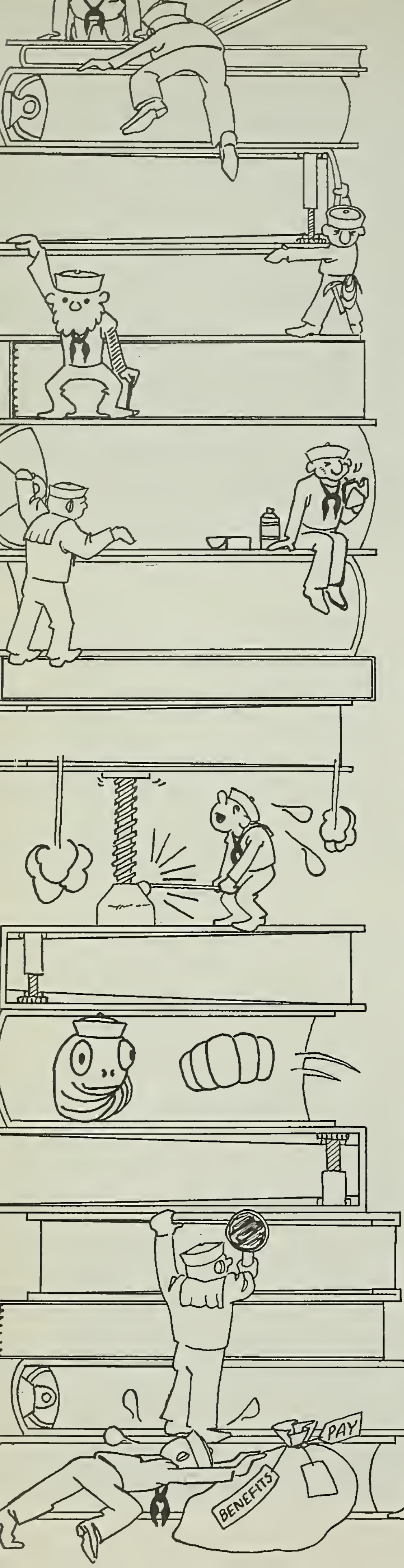
Among the other projects built by the Seabees were a "saturation bombardment" target, observation posts and new landing pads for helicopter pilots. Still another project was a missile target, and finally a series of pylon clusters to guide planes approaching the target areas.

When the four-month project was finished, most of the detachment flew to Midway to rejoin the main body of MCB-9, while a small group remained behind to supervise the crating and shipping of supplies and material back to Port Hueneme and Midway. They had completed another Seabee "Can Do" assignment.

— Fred W. Doby, JO1, USN.

TENTING TONIGHT—Seabees lived in this tent town on Smugglers' Cove while building target for planes and ships on Kahoolawe Island.

ELECTRICAL conduit is installed at island's blockhouse observation post.



This Is Where t

The fundamental laws which govern the Navy are taken from the Constitution, the treaties into which the U. S. enters, and laws passed by Congress. These, however, give only broad outlines. For express directions Navymen must rely on manuals and other printed directives.

UNLESS YOU'RE A YEOMAN, or in some other administrative or clerical rating, you probably don't have much contact with Navy manuals. But they can be invaluable when you need the right answers to the many questions which crop up in the course of your Navy hitch. Your queries may concern promotion, change of duty, retirement, change of rate, or a wide variety of other subjects. Maybe you're uncertain about uniform or medal requirements.

In any case, when questions do come up, you want an answer quickly. And, thanks to the printed word, usually to be found in manuals, chances are you'll be able to get the right answers with a trip or telephone call to your ship or station personnel office, which should have publications that spell out what you should do and how to do it.

There are manuals on safety, leadership, officer billet classification, survival, knots and photography; manuals for editors, chaplains, engineers, nuclear physicists, parachutists and seamen. There are special books on special services, flags and pennants, training and communications facilities, and even manuals about manuals.

IF ANY ONE OFFICIAL NAVY publication could be pinpointed as foremost in general importance, it would probably be *United States Navy Regulations*, or *Navy Regs* for short. In 21 chapters, *Navy Regs* outlines the organizational structure of the Department of the Navy and the principles and policies by which the Navy is governed.

When the first Navy regulations were compiled in 1775, they were known as *Rules for the Regulation of the Navy of the United Colonies of North America.* This represented one of the earliest printed documents relating to the U. S. Navy. It was also the basis of the rules by which the Navy has been governed for its 186 years of existence, although times have indeed changed. Sample *Navy Reg*, 1775 vintage: "All ships furnished with fishing tackle, being in such places where fish is to be had, the Captain is to employ some of the company in fishing, the fish to be distributed daily to such persons as are sick . . ."

The original *Navy Regs* consisted of 44 articles which take about seven minutes to read (if you're an average reader). They were primarily concerned with the feeding, care, rights, duties and punishments of the Navyman.

Today's *Navy Regs* (21 chapters, more than 300 pages) sets forth, among other things, the responsibility, purpose and authority of each bureau and office of the Navy Department and the more important officer billets. It is published in loose-leaf form and kept in an adjustable binder so that changes may be inserted as necessary. *Navy Regs* is issued by the Secretary of the Navy and approved by the President. The Chief of Naval Operations is responsible for changes to *Navy Regs*, but such changes must ultimately be approved by SecNav.

The current *Navy Regs* was issued in 1948, but numerous changes have been made since that date. It has a

Go for the Right Answers

table of contents and an alphabetical index which help considerably in pinpointing information.

ASIDE FROM *Navy Regs,* the principal general regulations, orders and instructions issued for the guidance of all Navymen (and women) can be found in *General Orders* and the various manuals issued by the chiefs of bureaus and offices, the Judge Advocate General and the Commandant of the Marine Corps.

Navy Department General Orders, customarily kept in the same binder as *Navy Regs,* covers special ceremonies, commendations, organization, budget and appropriations.

Bureau Manuals contain administrative and technical instructions which relate to matters under the jurisdiction of the various bureaus. All bureau manuals are issued in loose-leaf form, which makes it easy to insert corrections and generally keep them up to date. Orders and instructions contained in the manuals are binding upon all naval personnel, but they do not alter or amend any provisions of *Navy Regs* or *General Orders.*

In the day-to-day functions of your personnel office, perhaps the manual used most frequently is the *BuPers Manual,* which details the instructions governing the administration of all naval personnel. It is divided into five parts:

A – Organization, Plans and Control.
B – Correspondence, Post Offices, Records and Reports.
C – Administrative Regulations and Procedures.
D – Training and Education.
H – Instructions Relating to the Naval Reserve.

The missing parts – E, F, and G – have been cancelled or included in other parts of the *Manual.* There's also an index which helps you find what you want quickly. The *BuPers Manual* now in use was compiled in 1959, but frequent changes make parts of it even more recent.

The *Manual's* article numbering system is quite simple, and very efficient. Each of the five parts is divided into chapters; the chapters into articles. Every subdivision of each part of the *Manual* is identified by a number. Article numbers less than 10 are preceded by a zero; 01, 02, etc. The first digit indicates the chapter, the second refers to the section of the chapter (if it's sectioned), and the last two digits indicate the article. For example, if you want the *Manual* word on physical examinations for enlisted men before transfer, the quickest way to check would be to look in the index under "physical examinations," go down the listings of various check-up subjects until you come to "on transfer." There you see that article C-5403 has the scoop. You turn to part C, chapter 5, section 4, article 03:

Part C—"Administrative Regulations and Procedures."
Chapter 5—"Distribution and Transfer of Personnel."
Section 4—"Detachment and Receipt Procedures."
Article 03—"Physical Examination of Enlisted Personnel Prior to Transfer."

When you refer to instructions contained in the *Manual,* however, only the article (C-5403) need be stated when quoting authority. You can see that part, chapter, and section are included.

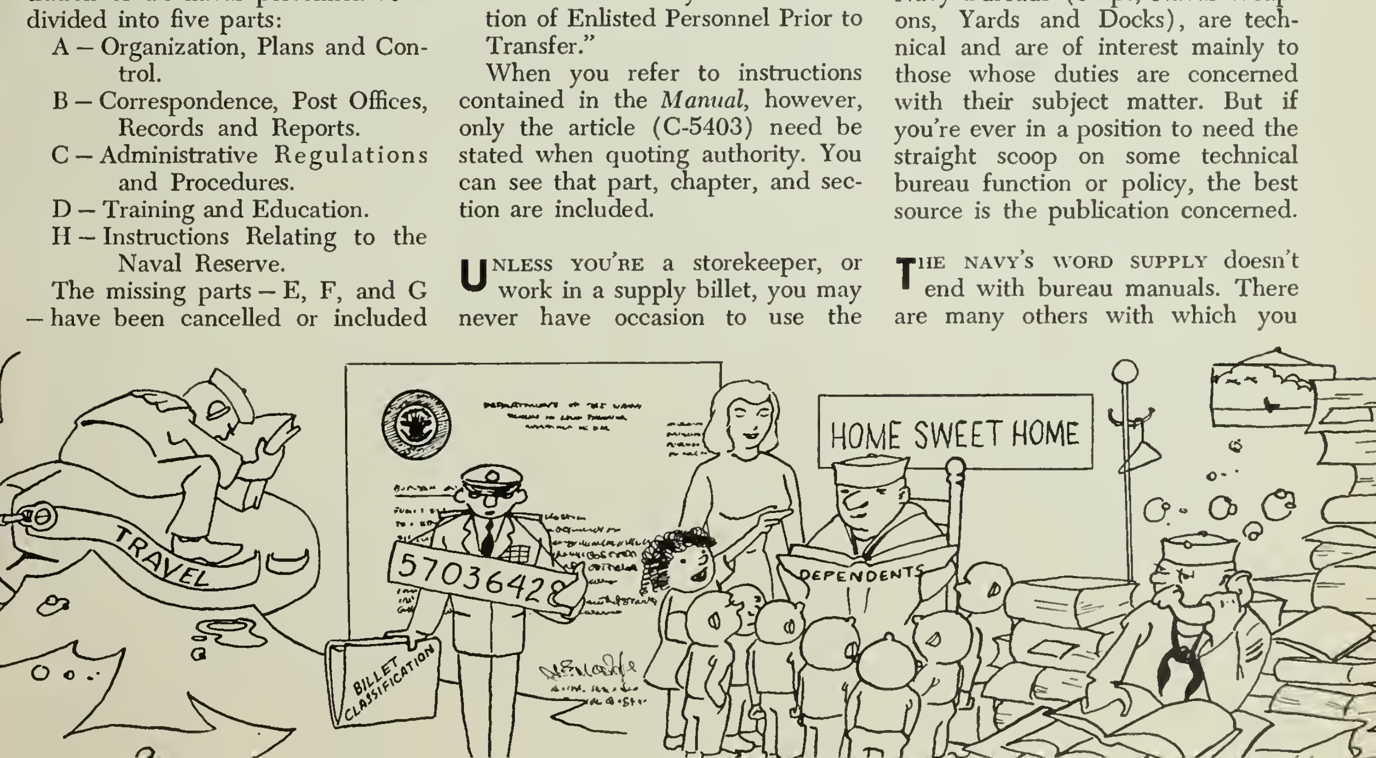
UNLESS YOU'RE a storekeeper, or work in a supply billet, you may never have occasion to use the *Bureau of Supplies and Accounts Manual,* which is issued in seven volumes. But, anytime you want to check the regulations and instructions for procurement, storage, and issue of equipment and supplies, the *BuSandA Manual* is the authoritative guide.

The *Navy Comptroller Manual* is a handy publication if you wish to check the printed word on disbursing and accounting matters. The *Comptroller Manual* is issued by the Office of the Comptroller, and is similar in organization to the *BuSandA Manual.* (Actually, the *Comptroller Manual* contains information that used to be included in disbursing and accounting volumes of the *BuSandA Manual.*) Volume 4 of the *Comptroller Manual,* often bound separately, covers Navy pay.

The *Manual of the Medical Department,* Bureau of Medicine and Surgery, details instructions for your medical care; directions for procurement, storage, issue and accounting of medical supplies; regulations on training medical and dental technicians; information regarding physical requirements and examinations; procedures for stowing health records and submitting reports and special instructions on procedures and reports in cases of death.

These, and other manuals of the Navy Bureaus (Ships, Naval Weapons, Yards and Docks), are technical and are of interest mainly to those whose duties are concerned with their subject matter. But if you're ever in a position to need the straight scoop on some technical bureau function or policy, the best source is the publication concerned.

THE NAVY'S WORD SUPPLY doesn't end with bureau manuals. There are many others with which you



should be acquainted and which you should consult for authoritative information on specific subjects. Your personnel office, depending on its size, will have all or some of the following:

United States Navy Uniform Regulations contains precisely what its title implies. This manual describes the various uniforms for men and women in all categories, lists the uniforms required, and contains a listing of articles worn or used together. It describes occasions when the various uniforms should be worn, methods of wearing medals, decorations, ribbons, rating badges and special markings, and gives notes on the over-all care of your uniforms. The current edition of *Uniform Regs* was published in 1959, and changes, as they occur, are issued by the Chief of Naval Personnel.

The *Navy Correspondence Manual*, published by the Navy Management Office, and issued as a SecNav Instruction, contains instructions for preparing all types of naval letters, endorsements, memorandums and messages. Instructions cover all parts of correspondence such as the address, subject, references, paragraphing and signature; and directions for assembling correspondence for signature and mailing. It also specifies standards to be followed when typing instructions and notices, and one chapter is dedicated to writing letters in civilian form.

GETTING TRANSFERRED? The *Enlisted Transfer Manual*, a BuPers publication, is a quick, easy-to-read reference which covers all facets of enlisted distribution. Seavey, Shorvey, Enlisted Personnel Distribution Office procedures, special programs and all types of duty are spelled out.

Joint Travel Regulations interprets the laws and regulations which concern travel, the manner in which transportation is furnished, provisions for dependents' travel, transportation of household goods, reimbursement for travel expenses, and other travel regulations and special money problems connected with travel and transfers. *JTR* applies not only to Navymen, but to all servicemen.

Navy Travel Instructions amplifies the rules laid down in *JTR* as they apply to the Navy (and Marine Corps). This is issued jointly by the Chief of Naval Personnel, the Comptroller of the Navy and the Commandant of the Marine Corps. In cases where *NTI* and *JTR* conflict, *Joint Travel Regulations* takes precedence.

If it's supplies you want, the *Federal Supply Catalog* contains a listing of all the supplies ordinarily issued by or for the various departments and government establishments. It also shows how to procure, stow and issue supply items.

The *Navy Stock List of General Stores* is an adaption of the *Federal Catalog*. It is prepared under the supervision of BuSandA and is distributed by the Naval Aviation Supply Depot in Philadelphia. The Catalog is extensive and fills many thick volumes.

NEED SOME BACKGROUND on an officer? The *Navy Register* (full title: *Register of Commissioned and Warrant Officers of the U. S. Navy and Marine Corps and Reserve Officers on Active Duty*), published each January by BuPers and issued to all ships and stations, contains, in addition to an alphabetical listing of all officers, a complete lineal list. (Most officers on active duty are assigned lineal numbers effective from 1 July of the year of publication of the *Register*. The purpose of lineal numbers is to establish an officer's seniority within his grade and corps. A lineal number consists of a whole number and a sub-number. Using sub-numbers makes it possible to add or take away names without renumbering the whole list. The system works inversely — the lower the lineal number, the higher the seniority. For example, an officer with a lineal number of 08939-40 is senior to an officer with a lineal number of 08939-82; the former has a lower sub-number. An officer with a lineal number of 08936-95, though, would be senior to both; he has a lower whole number.)

The *Department of the Navy Security Manual for Classified Information*, issued by the Chief of Naval Operations, is the basic Navy security directive. Its instructions apply to everyone in the Naval Establishment — military or civilian. The *Security Manual* contains detailed instructions for classifying, marking, and handling classified information, and for access to and authorized disclosure of information.

Although the *Security Manual* is the Navy's basic security directive, the *Guide for the Handling and Control of Classified Matter* serves as a command model for a uniform classified matter control system. It in no way supersedes the *Security Manual*. It mainly provides a standard interpretation of security rules for all commands.

FOR THE WORD on decorations, medals and awards, with the exception of the uniform manner of wearing them, the *Navy and Marine Corps Awards Manual*, issued by the Chief of Naval Personnel, is the authoritative guide. *Uniform Regs* (see above) describes the correct manner of wearing them.

The Law of the Land, so far as the Navyman is concerned, is the *Uniform Code of Military Justice*, with which Congress in 1950 established a single set of laws for ad-

ministering justice to all the armed forces. As a result, the *Manual for Courts-Martial* came out in 1951 to describe the types of courts-martial established by *UCMJ*, define their jurisdiction, and prescribe their membership and procedures. It also covers such matters as non-judicial punishment, review of court-martial proceedings, new trials and limitations on punishments. The *Manual for Courts-Martial* is a bound volume issued to the Navy through the Office of the Judge Advocate General. The *UCMJ* appears in the *Manual for Courts-Martial*, in the front of *Navy Regs*, and is issued as a separate volume (CNO 2090).

The *Manual of the Judge Advocate General*, a JAG Instruction, covers legal and judicial matters that apply only to the Navy. For example, the Manual includes instructions regarding Navy boards of investigation and examination, their composition, authority and procedure.

Court-Martial Reports, issued from time to time by JAG and distributed Navywide, contains excerpts from the records of various court-martial cases, with comments to illustrate points of law or procedure or to indicate decisions that may affect future cases. It is usually of interest only to legal officers and their assistants.

YOU KNOW YOUR JOB, but how about your code number? The *Manual of Navy Enlisted Classifications* is the official word. The *NEC Manual* aligns the coding structures with the enlisted rating structure concepts for general ratings, service ratings and emergency ratings. The purpose of enlisted coding is to show job specialization not indicated by rate alone, for use in distribution, detailing and expression of special training requirements.

How to advance? The *Manual of Qualifications for Advancement in Rating* is the official guide. It lists the minimum qualifications for advancement in all enlisted ratings of the Navy.

If it's an education you're seeking, the *Information and Education Manual* is must reading—mighty interesting, too – even though it is designed for the use of I & E officers. The Navy's official I & E program received its start shortly after the U. S. entered World War II. In September 1942 the Bureau of Naval Personnel sent an officer and a ton of educational material to Guantanamo Bay, Cuba, on an exploratory basis to establish classes and offer educational counseling to Navymen. It was so successful that in January 1943, the Chief of Naval Personnel authorized an Educational Service Section within BuPers to administer the now official I & E Program.

Today the mission of I & E is to provide Navymen on active duty with opportunities designed to increase their efficiency, broaden their academic and technical background and build and maintain morale. The objectives of I & E are fulfilled through individual programs at all ships and stations. Educational material and services are made available to each command through the I & E section of BuPers. Correspondence courses through USAFI (U. S. Armed Forces Institute), which works hand-in-hand with Navy I & E, may be accredited as the equivalent of the same type of courses offered by many civilian educational institutions. *The I & E Manual* is invaluable for information on the program, the job of the I & E Officer (every command has one), counseling, USAFI course offerings, group study, testing, accreditation and the like.

Guide to Manuals

Manual about manuals? The *Navy Stock List of Forms and Publications* is it. The *Requisitioning Guide and Index Section* of the *Stock List, Cognizance Symbol I* (*NavSandA* Publication 2002), provides the information required to obtain publications stocked by the Navy Supply System. Included are requisitioning procedures and sources of supply to assist in determining how and where the manuals covered above, and other forms and publications, may be obtained.

THERE ARE, OF COURSE, many other technical manuals and instruction books which are aimed at the specialist. The *Public Information Manual*, for example, issued by the Secretary of the Navy, provides policy and guidance for the conduct of Navy public information and is a must for any PIO or Navy newsroom. JOs, PIOs, and others who work in public information are all familiar with this manual.

Other specialty publications include such useful items as *Landing Party Manual*, which contains instructions on military drill, ship landing parties, emergency ground defense force units, etc.

And, there are manuals for almost every Navy rating, designed to aid you in advancement. These, the *Navy Training Course Manuals*, are usually studied in connection with written courses.

It would take a thick manual just to list all Navy publications. As a result, many have been overlooked in this description. But, they all have one thing in common: Each fulfills a distinct purpose and is priceless when you need it.

—Dan Kasperick, JO1, USN.

Sailing Ship Sailors

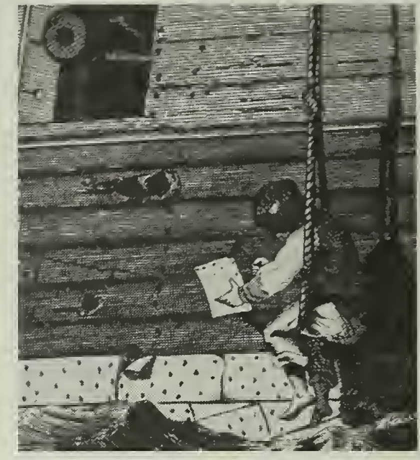
In spite of automation there are still men in the Navy, and Navymen have jobs to do. It was ever thus. However, the jobs Navymen did when jolly tars manned the sails and captains of the tops bawled orders to the men aloft are a far cry from the jobs done by modern sailors in a Navy which runs on oil and nuclear power; delivers punches measured in megatons; and fights with missiles which travel faster than sound.

It is in the story of the Navy's jobs, which are reflected in our present-day rating system, that changes in the Navy have been recorded. And what changes they have been — sails to coal, coal to oil, oil to atoms, hot shot to missiles. You name it, we have it.

For those who would like to know what they would be doing had they been born a hundred-or-so years sooner, here is a look at what the old Navy was like and some of the jobs the men did.

Any sailor who joined up between the Revolution and the Civil War era might not have enlisted as a Navyman but as a Navy boy. In an era when apprenticeships were served by most job hunters, the Navy was no exception.

In 1875, boys entered the Navy as second class. For their time, they received the sum of $10.50 per month plus one day's ration.



PATCH WORK—Member of ship's carpenter gang hangs over the side to repair damage to hull.

The Navy guaranteed its boys the elements of an education and taught them how to be sailors. Before they graduated into the Navy, these lads had to know the principal parts of a ship, the names and uses of all the sails, spars and rigging. They had to understand the bending, unbending, reefing and furling of sails and the handling of yards and spars.

In addition to these elemental bits of knowledge, the boys had to learn to be good oarsmen, familiarize themselves with the compass, lead and helm and, as contemporary regulations put it, had to be "moderately skillful (and) much comprehended under the head of 'Marlinspike seamanship.' "

From six to 12 boys from each crew were selected for signal training. They all learned gunnery and were given small-arm drill and broadsword exercises.

The Navy apparently recognized the fact that boys confined on board ship needed an opportunity to rid themselves of excess energy. It recommended they be put ashore whenever practical to engage in exercises. This, the regulations said, would cut down on endless requests for liberty.

To curb exuberance on board ship, captains of the mess were stationed at strategic points to keep the boys from throwing food at each other and stern warnings were issued against "skylarking" and loud talking on the boys' sleeping deck.

Fresh recruits were brought on board, bathed, given a haircut and vaccinated. If, after having been afloat for a time, they were considered potential officer material, they were designated midshipmen, usually before reaching their twentieth birthday.

Navy Department Rules, 1832, stated: "Boys are sometimes, by special letter from the Department, to be treated as Midshipmen; but, in such cases, they receive only boys' pay."

They slept in hammocks and lived mainly on salt pork and beef supplemented by fresh fish caught from the ship by a detail assigned for that purpose.

If they were deserving of the privilege, having studied hard and kept themselves out of trouble, they could ask their CO for pocket money and go ashore one afternoon a week in addition to Sunday afternoon, which seems to have been free time for most who kept out of trouble.

Navy boys usually grew up to be regular Navymen, earning what we would now call a rating. Regular

NEW ERA—Change-over to coal-burning ships affected Navy ratings.

BIG DIFFERENCE—Many changes have taken place in ships and ratings since the days of the canvas fleet.

Navymen in the sailing days formed the hard corps which told the sailors with little or no experience what to do and when to do it.

These inexperienced seamen were called landsmen and there were quite a few on board early sailing vessels. In 1776, Congress issued instructions to commanders of privateers which advised, "one third at least of your whole company shall be landsmen." A reason for this was to discourage privateers from taking all of the qualified seamen needed by the Continental Navy.

LANDSMEN were erstwhile civilians taken on board without training who did jobs which could be done as well in a ship as on shore. They included men like tailors and cobblers who, by 1876, were dropped as landsmen in favor of the rating and pay of seamen. Barbers, however, didn't make it. After 1876, they were still rated and paid as landsmen. Oddly enough, the landsman rating was not abolished until the 1920s.

NAVY RATINGS were first defined in the "Rules and Regulations of the Navy of the United Colonies" which was largely the work of John Adams. These regulations were published in 1775 and, despite the haste with which they were compiled, are the basis by which the Navy has been continuously governed since then, and the sense of almost all its articles is still a part of *United States Navy Regulations.*

The rules specifically mention ratings such as surgeon's mate, cook, armourer, gunsmith, master-at-arms and sailmaker.

Protection for the men's ratings was provided when the rules specified captains would not rate men "on the ship's books in a worse quality, or lower degree or station than they served in the ship they were removed from."

EARLY-DAY boatswain was usually a grizzled old salt who wasn't timid about giving out orders.

Captains were also cautioned to enter the name of a man in the ship's book when he was enlisted "in order to his being justly paid."

Some rated Navymen in the sailing days were considered officers of sorts. They were the forerunners of our present CPOs and WOs.

Several categories were referred to as being "civil officers." These included chaplains and surgeons who remained in the officer ranks.

EARLY DAY surgeons were assisted by the surgeon's mate. He was a medical man and, like the surgeon, was considered a non-combatant civil officer. He was a combination yeoman, corpsman and leading chief. He kept a journal of diseases and treatment, weighed and accounted for every article of medicine, dressed wounds and ulcers and performed bloodlettings.

He supervised the orderlies and loblolly boys (who kept the sickbay clean and brought the patients a thick gruel called loblolly).

Originally a surgeon's mate ranked in importance with a sailmaker

SAILING, SAILING—Boat returns after session with the oars. *Rt:* Sailing salts sit down at their mess.

or a midshipman. He was later advanced by Congress over all other warrant holders and placed on a level with the surgeon and chaplain.

The purser was also listed as a non-combatant civil officer. He was appointed by warrant. He usually had the coziest quarters on board ship and, although his pay wasn't much, his negotiations often brought him an income which exceeded that of the captain.

The purser was charged with supplying the ship with provisions. He was assisted by the purser's steward who was usually called "Jack of the bread-room" and later became "Jack-o'-the-dust." Coopers (who made buckets and barrels) were sometimes assigned to this duty.

Pursers kept the small stores on board ship and were authorized to sell slops (clothing), tobacco and other small items sailors needed in those days, such as tin pots, spoons, pepper, mustard, knives, needles and thread. He was limited by law to a 15 per cent profit on all his business dealings which was later upped to 25 per cent.

Being a purser wasn't all gravy. He had to account minutely to the captain for everything he sold. If he couldn't prove his profit was limited to the amount prescribed by law, there was no profit at all. If there was any loss sustained with slops, he was the man who bore the loss. Nevertheless, being a purser was a good spot and the job was widely sought after.

THE EARLY DAY boatswain was a combatant officer who was appointed by warrant and was among the top men on board ship. He was usually a grizzled old salt who wasn't timid about giving orders and never even dreamed they would not be obeyed. He was assisted by his mates and, in case he was unrecognizable in other respects, he carried a silver pipe and a rattan cane.

HARD START—Seamanship used to be learned at sea from deck up.

His pipe was the sailing ship's PA system. It could be heard up 120 feet in the top of the rigging and heard down in the farthest and darkest hold.

His cane was an instrument of persuasion which, it was said, "cured more scurvy than the doctor, made cripples take up their beds and walk and made the lame skip and run up the shrouds like a monkey."

He examined rigging, anchors and boats and saw that the crew engaged in no wasteful practices.

In addition to supervising the deck crew, the boatswain was responsible for administering severe punishments such as lashings with the cat-o'-nine-tails. This job was later given to the boatswain's mate, then abolished in the Navy as cruel and unusual punishment.

A boatswain had, in addition to his other mates, a yeoman; a petty officer, who accounted for the department's equipment; a rope maker, usually an experienced and able-bodied seaman; and a cockswain, who was in charge of the Cock (Cog) boat, which was the largest boat aboard ship.

ANOTHER OF THE BOATSWAIN'S men was the sailmaker. This worthy, who was also a power on board ship, worked in a large sail loft. He

SOME CHANGE—Navymen in 1800's practice with swords. *(Rt.)* Coal passers came with steam ships.

was responsible for the hundreds of yards of canvas which caught the power for his ship. He found and repaired defects in the sails, tallied and stored them. While they were stored, he inspected them to see they didn't become waterlogged or that vermin didn't eat holes in them.

The sailmaker wasn't only in charge of sails, he had the responsibility for all the canvas aboard ship, including hatch covers, screens, chutes, hammocks, clothing bags and what have you.

The ship's carpenter, a combatant officer appointed by warrant, supervised a group of shipwrights (shipworkers) who were kept on board to repair the ship's frame. The carpenter also had working for him other craftsmen who tended to the general upkeep of the ship and repaired it during and after a battle. Decay had to be prevented and, when seams began to open, they were caulked with pitch by the caulker.

The carpenter went aloft at least once a day to inspect the masts and yards in order to see if any had been sprung or were otherwise defective. He examined lower deck ports to see whether or not their alignment was proper and he kept the ship's pumps, boats, ladders and gratings in a good state of repair.

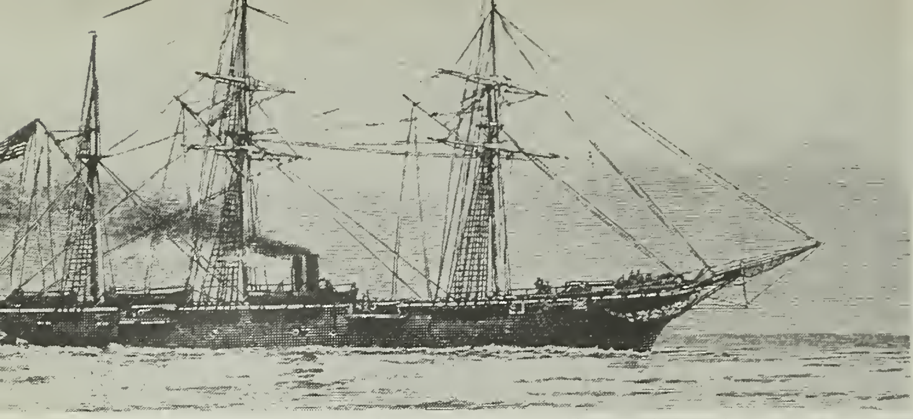
He kept a supply of shot plugs ready for use to repair damage done during battle, much in the same way damage control tackles the same problem today.

WITH THE ADVENT of steam and iron ships, the ratings that today seem so unusual and, if you'll pardon the expression, quaint, began to pass from the scene.

The Navy's big change to steam was reflected in the rating structure when coal heavers and coal passers joined the Navy. Changes in rating have been made since then to mirror the arming of ships with missiles; the use of sonar, radar, nuclear power and all the other advances which the Navy has made in the last 40-odd years.

Maybe the future will bring about such ratings as space pilot, space station keeper or moon crater inspector. This may be a little on the Buck Rogers side at the moment, but it would be sheer folly to say these, or some ratings like them won't show up in the Navy's rating structure before the end of the century. — Robert Neil.

GOING UP—In days of yore, 'Stand by to lay aloft' was a familiar call.



SLOOP-OF-WAR *Kearsarge* was first U. S. ship to bear this name. Her armament included two 11-inch guns.

One Hundred Years with

ON A DAMP, WINDY DAY in Portsmouth, N. H., 101 years ago a seven-gun sloop-of-war was commissioned USS *Kearsarge*. This marked the beginning of ships named after Mt. Kearsarge, N. H. – ships which for more than a century have made the name Kearsarge synonomous with the Navy and naval history. There have been three of them: The sloop, a battleship, and today's aircraft carrier.

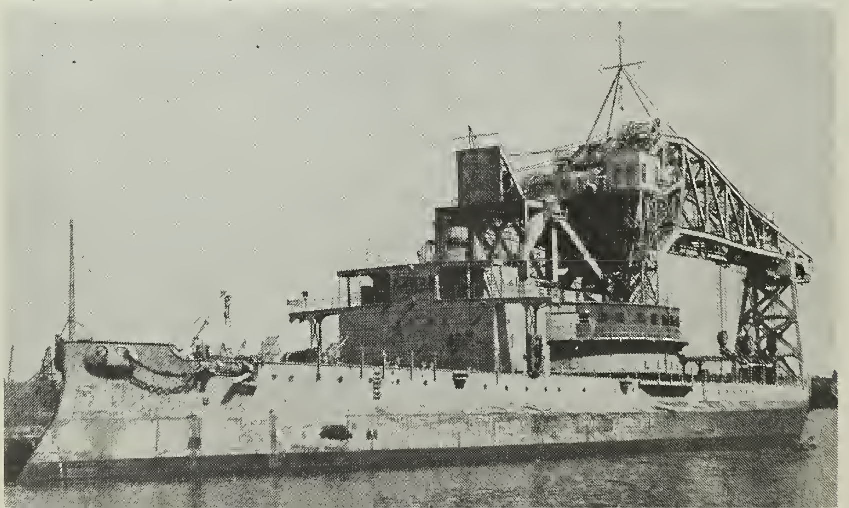
The first *Kearsarge* displaced 1550 tons, was 201 feet in length and measured 34 feet at the beam. She was armed with two 11-inch Dahlgren guns, four 32-pounder guns, and one 30-pounder rifle. Her crew consisted of 163 officers and enlisted men. She was commissioned on 5 Nov 1861.

The highlight of this ship's career occurred during Civil War action off Cherbourg, France, on 19 Jun 1864, when she sank the Confederate cruiser *Alabama*. *Alabama* had steamed out of Cherbourg harbor to accept a *Kearsarge* challenge. The two ships met seven miles off the coast, and, after 65 minutes of broadside exchanges, *Alabama* was in a sinking condition. Twenty minutes later she went down. *Kearsarge* had fired only 175 shots, *vs* at least 370 by *Alabama*. Only three *Kearsarge* crewmen were wounded, as compared with 40 killed or wounded on board *Alabama*.

Later that year *Kearsarge* was taken out of commission for repairs and refitting, and was recommissioned on 1 Apr 1865. She operated with the European Squadron until June 1866, then returned to the U.S. and was again taken out of commission for repairs (at Boston). Recommissioned in January 1868, *Kearsarge* was attached to the South Pacific Station until 1870.

After another period of yard work, *Kearsarge* served for three years with the Asiatic Squadron, then cruised for four years on the North Atlantic Station. In 1883 she was assigned to the European Station, and for three years cruised extensively in the Mediterranean, along the West African coast and between ports of northern Europe.

DOUBLE DUTY — USS *Kearsarge* (BB 5) was converted to a 250-ton-capacity crane ship (AB 1), and used in the Pacific during WW II.



From 1889 to 1894 *Kearsarge* cruised in the West Indies and off the coasts of Venezuela and Central America. One of her West Indies cruises proved to be her last. On 30 Jan 1894 the ship steamed for Nicaragua from Port-au-Prince, Haiti, and was wrecked on 2 February on Roncador Reef off Central America. Her officers and crew were rescued, but *Kearsarge* was unsalvageable.

Her name was stricken from the Navy list in 1894.

The career of this first *Kearsarge* was so outstanding that Secretary of the Navy Hilary A. Herbert urged President Cleveland to allow a battleship to be designated *Kearsarge*. Although this violated the policy of naming battleships for states only, Congress in 1895 directed that it be done. To this day, the battleship *Kearsarge* was the only U. S. Navy BB not named for a state.

Commissioned in 1900, the second *Kearsarge* had a normal displacement of 11,540 tons, had four 13-inch guns, four 8-inch breech loading rifles, fourteen 5-inch/.40-cal. guns, twenty 6-pounders, four Gatling guns, four 18-inch torpedo tubes and one field piece. Her designed speed was 16 knots, and she was designed to carry 40 officers and 513 enlisted men.

One of the highlights of the BB's career was a cruise around the world with the Great White Fleet (1907-09). She also participated in

FORWARD 11-inch gun is manned.

NUMBER TWO — The second *Kearsarge* (BB 5) was only battleship in the history of the United States Navy not named after a state.

earsarge

the search for German submarines in World War I.

Kearsarge was taken out of commission in 1920 and soon after was converted into a crane ship. She was carried on the lists of active service craft as Crane Ship No. 1 (AB-1 was her designation) until she was sold for scrapping on 9 Aug 1955.

Today's *Kearsarge* was commissioned an *Essex*-class CV on 2 Mar 1946 at New York. She is approximately 900 feet long, displaces 39,000 tons, and is capable of 32-plus knot speeds. She carries approximately 3000 officers and enlisted men.

Here are some highlights of the carrier's activities, as recorded in her history:

16 Jun 1950 – *Kearsarge* was taken out of commission and placed in the yards at Bremerton, Wash. After a 20-month conversion period, she was recommissioned on 15 Feb 1952 as an *Oriskany* class carrier, and was able to handle the faster, modern jets which were rapidly replacing propeller-driven aircraft.

September 1952–Kearsarge tasted combat for the first time. Planes from Carrier Air Group 101, based aboard the carrier, flew sorties against North Korean supply facilities.

Fall 1954 – *Kearsarge* took part in the evacuation of the Tachen Islands, 200 miles northwest of Formosa. Her aircraft flew cover missions.

July 1956 – *Kearsarge* again went into the yards at Bremerton. The result: An angled flight deck, hurricane bow and other new features.

1 October 1958 – Kearsarge was redesignated as an antisubmarine aircraft carrier (CVS).

September 1959 – While cruising in the Far East 400 miles from Yokosuka, *Kearsarge* received an order from Seventh Fleet headquarters to proceed to Nagoya, Japan, which had been hit by typhoon *Vera*. For six days *Kearsarge* helicopters carried Japanese people to safety and rendered whatever relief she could muster including donations from the crew.

6 Mar 1960 – En route to the U. S. after a Far East cruise, *Kearsarge* rescued four Soviet soldiers who had been adrift in a 50-foot landing craft for 49 days. (Winds of near-gale force had blown the Russians 1020 miles to sea from the site of maneuvers in the Kurile Islands). *Kearsarge* provided the men with medical care, after which they were returned to Soviet Embassy officials in the U. S.

At present, *Kearsarge* is in Bremerton, Wash., for a seven-month conversion period.

THIRD AND LATEST *Kearsarge* was commissioned an *Essex*-class CV in 1946 and redesignated a CVS in 1958.

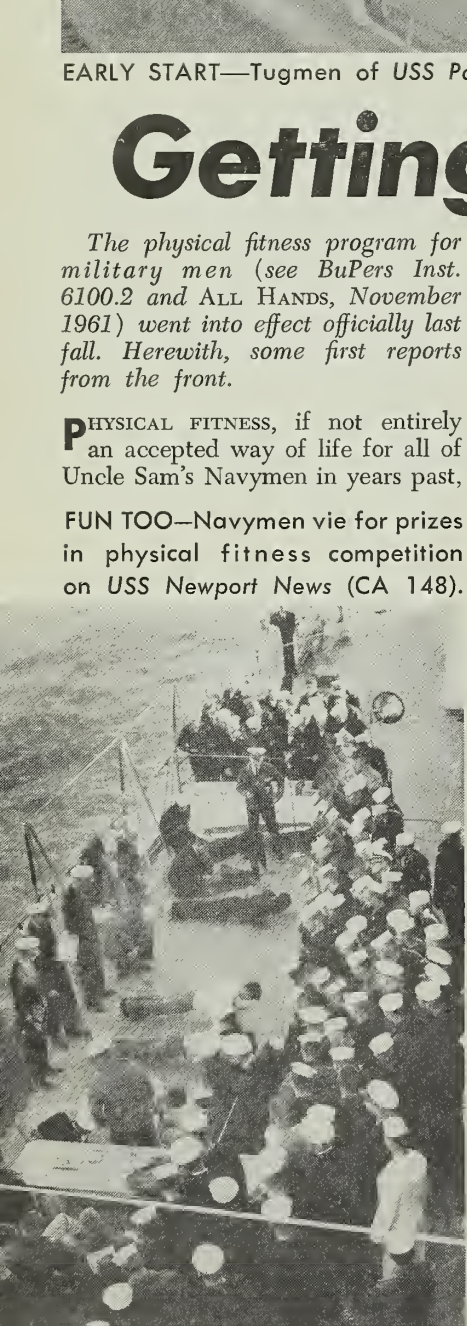
EARLY START—Tugmen of *USS Paiute* (ATF 159) began their own physical fitness program last summer.

Getting Fit as a Fiddle

The physical fitness program for military men (see BuPers Inst. 6100.2 and All Hands, *November 1961) went into effect officially last fall. Herewith, some first reports from the front.*

Physical fitness, if not entirely an accepted way of life for all of Uncle Sam's Navymen in years past, is now an integral part of our regular routine. And the reaction of most of the Navy to the edict to get in better shape has been highly favorable.

FUN TOO—Navymen vie for prizes in physical fitness competition on *USS Newport News* (CA 148).



As expressed to All Hands, opinions thus far have ranged from "We'll take this thing in stride," to "Let's go all-out."

There is, for example, the Fleet tug USS *Paiute* (ATF 159), which even went so far as to steal a march on the new program. Last summer, while performing towing services in Guantanamo Bay, Cuba, *Paiute's* crew assembled on the fantail for 15 minutes of calisthenics each morning after reveille. Crew members over the age of 40 were encouraged to participate according to their ability, and all did.

As a result, when the President's program for the armed forces was announced in late August, *Paiute's* entire crew (including the 40-and-more-year-olds) was ready and able to meet the required standards. *Paiute* thus claims the distinction of being the first ship 100 per cent qualified under the new program.

Paiute's activities might appear at first glance to be a trifle gung ho – but the truth is that a good many Navymen needed no order from on high to maintain good physical condition. They've been doing just that, either through a command-instituted program or on their own, all along.

At Pacific Mine Force Headquarters, Long Beach, Calif., for instance one flag allowance Navyman greeted the announcement of a formal, three-workouts-a-week program for all hands with a dismayed "Whaddya mean, three. Why can't I keep up my usual five?"

Through its mandatory three-sessions-a-week-at-the-MINPAC-gym schedule, MINPAC intended to have all its headquarters personnel in top condition by the time the official starting date for the physical fitness program rolled around.

The NROTC Unit at the University of Michigan was still another Navy installation jumping the gun on the deadline. Since the unit planned to begin administering PF tests to its midshipmen in January, USN officers and enlisted men attached to the unit took the test themselves in early December.

They wanted to know if any Navy ROTC staff could top two records marked up by one of their members – namely, 41 push-ups and 72 sit-ups. (All Hands received a report on sit-ups from the Fleet that far exceeded this record).

Many ships and commands are making the program more interesting by introducing the element of competition.

The heavy cruiser USS *Newport*

News (CA 148) staged a Physical Fitness Olympiad in connection with the program while anchored off the coast of Livorno, Italy, not so long ago.

Contestants were selected from the 29 divisions on board, and included two officers who represented department heads and division officers. Contenders were awarded two points for each push-up and sit-up, four points for each chin-up, one point per inch in the broad jump, and one point for every three steps in the running-in-place event.

Over-all champion was Seaman Gerald A. Marek, USN, with a total of 580 points. And, in addition to his "Physical Fitness Champion of USS *Newport News*" title, the Milwaukee, Wis., Navyman received a portable stereo phonograph for his efforts.

The attack aircraft carrier USS *Bon Homme Richard* (CVA 31), meanwhile, combined a push-up contest with a day-long charity carnival at sea. More than 20 division and squadron representatives battled it out, with *Bonnie Dick's* operations officer (age 40-plus) copping first place with a belly-ful of push-ups, 78 in all.

Back in the Med again, *Newport News* and Seaman Marek followed up their own Olympiad by entering a similar event involving the nine ships of the Sixth Fleet's Task Group Gold.

Besides *Newport News*, the attack aircraft carrier USS *Intrepid* (CVA 11); guided missile destroyers *Gyatt* (DDG 1) and *Dupont* (DD 941); radar picket destroyers *Bordelon* (DDR 881) and *Greene* (DDR 711); destroyer *Keith* (DD 775); Fleet oiler *Elokomin* (AO 55); and ammunition ship *Great Sitkin* (AE 17) competed.

Newport News, with the superbly conditioned Marek running away with individual scoring honors, nosed out *Intrepid* and *Keith* for the team trophy.

At MINPAC, the one officer and one enlisted man in each of several age groups (30 and under, 31 to 39 and 40 and over) who scores highest in the quarterly testing, based on a point system, is presented a COMMINPAC Certificate of Achievement award.

The above, as we've already pointed out, are just a few of the many reports which have reached us during the past several months, as the Navy embarked on one of the most extensive mass-conditioning programs ever undertaken. And, if all of this strikes you as much ado about nothing, you might consider a couple of fairly recent events.

ON THE RUN—Men of *Newport News* compete in run-in-place event.

In the Pacific, near Hawaii, LTJG James F. Reed, USN, of the San Diego-based destroyer USS *Braine* (DD 630), swam more than 300 yards through heavy seas to rescue Seaman Louis J. Brindl, a fellow crew member who had been washed overboard by a mountainous wave.

Up in Greenland, five-foot-one, 135-pound Seaman Albert W. McKeown, of Underwater Demolition Team 21, walked and ran some 12 miles over icy terrain in one hour and 45 minutes to bring help and rescue to 40 U. S. servicemen injured by a landslide.

McKeown and Reed furnish just two examples of how courage, *combined with physical stamina*, can pay off in the best possible way—saving lives.

★ ★ ★

A special issue of the BuPers *Special Services Newsletter*, devoted entirely to the men's physical fitness program, points out that many provisions of BuPers Inst. 6100.2 are being variously (and in many cases,

'FROG MAN'—Contender in Gold Group Olympiad does broadjump.

DAILY ROUTINE—Destroyermen on board *USS Henry B. Wilson* (DDG 7) keep in condition with calisthenics.

wrongly) interpreted by individual commands.

Here are some points to remember:

- Physical fitness programs (testing and/or organized, mandatory conditioning periods) should not necessarily be confined to non-working hours. The original DOD directive which instituted service-wide physical fitness programs authorized such programs to be established and maintained within existing working and training schedules. The decision is up to the individual CO.
- BuPers Inst. 6100.2 requires that a statement of performance be included in an officer's fitness report or in the enlisted performance evaluation sheet *only when such performance falls below the required minimums.* Grades for everyone, based on the graduated achievement standards found in the instruction, might place Navymen in the upper age limits at a disadvantage, particularly when not all commands include such grades in their respective evaluations.
- Graduated achievement standards listed in Enclosure One of BuPers Inst. 6100.2 are intended for use as a motivating device or a rough rule-of-thumb measure for COs, or as standards for self-evaluation. No attempt has been made to equate performances from a viewpoint of age differences. The lower categories are lower than would normally be set for Navymen in the lower age groups, while the upper categories are higher than older men should be expected to achieve to attain a comparable high rating. Roughly, the Satisfactory category is set at the minimums for Navymen near the upper age limits; the Outstanding category is pegged near what the trained athlete would normally do.

In other words, if you're a 35-going-on-40 E-6 or E-7, do as well as you can, and slowly work toward improved performance. Don't make the mistake, however, of feeling that you must match the exploits of a person 10 years younger than yourself. You might do yourself more harm than good.

- While we're on the subject of possible harm – the Chief of the Bureau of Medicine and Surgery is on record as stating that squat-type exercises may be harmful, particularly to the ligament structure of the knee. Squat exercises, such as squat-jumps, squat-thrusts and duck waddles, therefore, are not included in the Navy's official program.
- In categories I and II (push-ups or pull-ups and sit-ups) performance must be continuous. Once testing is begun, no resting between counts is allowed.

Events in both of these categories are not timed. Performance of a single event continues until the performer stops himself. Timed performance is found only in the conditioning program set forth in BuPers Inst. 6100.2.

- As for Category IV (300-yard shuttle run or three-minute stationary run) some initial reports from the field indicate that sailors are being given a choice between the two events. No such choice is authorized – *when space for the 300-yard shuttle run is available, it must be run unless medical excuse is authorized.*

In addition, reported times thus far for the shuttle run reveal wide discrepancies. In some instances a full 300 yards is not being run or the clock is being stopped between each leg of the shuttle. Once the clock is started, it should not be stopped until the performer has run all five of the 60-yard legs of the shuttle. The 300 yards is to be covered in one continuous run.

In the case of the stationary run, the clock should run continuously for three minutes. The astride jumps between each 100 counts should be made with the clock running. They are taken into account in the standards as they are set.

- To a large extent, failure to attain the required level of physical fitness is due primarily to overweight. Forty pounds of excess body tissue not being used or trained

IN THE MED—Sixth Fleet sailors take part in an olympiad as part of their physical fitness program.

properly is akin to 40 pounds of sand carried on your back while attempting to perform the various events.

Weight reduction is a medical problem. Stringent dieting programs should be carried out only under the supervision of a medical officer. Commands should recognize such programs as the key to effective physical conditioning, however, and make arrangements accordingly. Motivational gimmicks can be a big help here. NAS Alameda, Calif., for example, has started a contest, with cash prizes based on the percentage of weight lost.

- The intent of the physical fitness program is to bring all Navymen to the desired level of physical fitness, and keep them there. This can be done only through continued programs of conditioning.

Along these lines, it might be well to reiterate that the Chief of Naval Personnel still emphasizes strong sports programs as the best method of maintaining over-all physical conditioning. These should include all levels of competition.

Opportunity for Good Sports

Are you an amateur athlete of potential Olympic Games caliber? If you are, you no doubt have your eyes fixed on 1964 and Tokyo. What you may not know, however, is that there are other international sports competitions slated before the 1964 Olympics – and, if you can cut the mustard, the Navy wants to hear from you.

A recently published directive (BuPers Inst. 1710.2A) lists some of these events, and solicits applications.

Events include the Pan-American Games, tentatively set for Brazil in April 1963, and the regular yearly contests held under the auspices of CISM (Conseil International du Sport Militaire).

Both you and the Navy can benefit from your participation in competition of this type.

If, for example, your credentials and past performances warrant such a move, you might be temporarily assigned to a location where proper training facilities and instruction are available.

Many Navymen who wind up as U. S. team members for international play reveal themselves, of course, through All-Navy and interservice tournament competition in such sports as boxing, basketball and volleyball. There are many others, however, which appear on the Olympic agenda, but are not included in the All-Navy program. Track and field, archery, wrestling and swimming are some examples.

To be eligible for participation in international sports competition, you must be an officer or enlisted person of the Navy or Coast Guard ordered to active duty for a period of 90 days or more, must be found to be in excellent physical condition by a medical officer, and must be a bona fide amateur under the following conditions:

- Must not be, or knowingly have become, a professional in any sport.
- Must not have received reimbursement or compensation for loss of salary.
- Must not have been a teacher receiving pay for instruction in physical education or sports.

(Note: With the exception of boxing, these proofs of amateurism are not required for CISM competition).

Here's what you should do.

Address your application, via your commanding officer, to the Chief of Naval Personnel (Attn: Pers-G11) or the Commandant of the Coast Guard, as appropriate.

It should be in triplicate, should reference BuPers Inst. 1710.2A, and should include your name; rank/rate; serial / file number; present duty station; date reported; expiration date of your present enlistment or planned RAD; home town; height; weight; age; whether physically qualified; sport; past experience (include all pertinent data – AAU, NCAA, YMCA, etc., last date of competing, best times, distances, heights and other information); statement concerning the suitability of training facilities at the installation, or in a readily accessible community, for the sport in which you are making application.

You must also sign and have certified by your Special Services officer the following statement: I, the undersigned, declare on my honor that I am an amateur according to the Olympic Rules of amateurism and that I fulfill the conditions required by the Olympic Rules.

Here's your chance to demonstrate your athletic potential.

— Jerry McConnell, JO1, USN.

YOUR SHOT — 'Pigeons' fly at Yokosuka's skeet range. *Rt:* Pocket billiards is popular in 'rec' building.

Seventh Fleet Gets

SOONER OR LATER, just about every Pacific-based seagoing sailor hits Yokosuka, Japan. Many another Navyman can look forward to a tour of overseas shore duty at the largest U. S. naval installation in the Far East during some stage of his career.

Every day of the year the Yokosuka area is aswarm with U. S. Bluejackets, and — whether they're of the shipboard or shore-bound variety — they're usually looking for "something to do." Providing them with that something is the very special activity of the Fleet Activities Yokosuka Special Services Department.

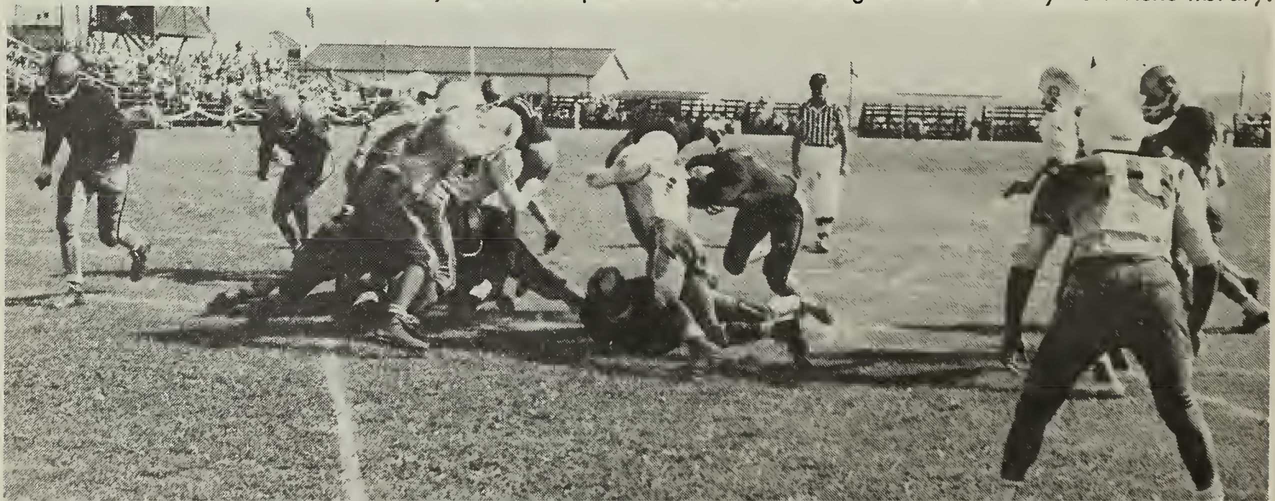
In fulfilling its two-fold mission of serving personnel stationed in the Yokosuka-Yokohama sector and providing rest and relaxation for Seventh Fleet sailors, FLTACTS Special Services ranges from the mountains to the open seas; from the excitement of downtown Toyko to the pastoral quiet of the station library. Its aim is to provide something for everybody, and from the looks of things, it comes mighty close to doing just that.

Last year, for example, its facilities were enjoyed by nearly one-and-one-third million people. Granted that there were a considerable number of repeaters in that total, it still adds up to a lot of fun in the sun, and indoors too, for a lot of Navymen and their dependents.

Fltacts Special Services offers all of the usual, and plenty of the not-so-usual, too.

If you're the athletic type, for instance, you'll be in seventh heaven. There are several gymnasiums, housing basketball courts, weight-lifting equipment, boxing rings and facilities for practice and instruction in judo, karate and other forms of physical fitness endeavor. The area

LOTS OF VARIETY — Yokosuka varsity teams compete in interservice league. *Above:* Navyman visits library.



around Berkey Field House includes football fields, baseball diamonds, tennis courts and a Little League field.

A far-ranging intermural program encompasses baseball, softball, handball, football, pistol shooting, soccer and more than a dozen other sports. And the various SEAHAWK varsity clubs (football, baseball, boxing, etc.) provide a kettle-full of exciting spectator entertainment.

If, on the other hand, the hunting and/or fishing bit is more appealing to you, you've really got it made.

Quail, dove, boar, deer and bear abound in various sections of Japan, and lack of a gun is no problem,

BUSMAN'S HOLIDAY — Navymen compete in Special Services race at their boat club. *Below:* Recreation craft stands by for cruise.

Big Treat

for the Special Services Rod and Gun Club will check one out to you for a normal two-day period, or for the duration of your leave. Fishermen will find a full assortment of deep-sea rods and reels for the big ones, and fly rods and flies for trout from the mountain streams. The club also maintains its own skeet range.

If a busman's holiday is your desire, there are 39 motor and sail boats available for your enjoyment. By joining the Special Services Yacht Club, you become eligible to qualify as a race master of a boat in the many inter-club and international races staged each year. Or, you might consider a pleasure cruise around Tokyo Bay aboard *Miss Fay*, a 104-foot yacht which at one time was the personal craft of former Korean President Syngman Rhee.

Barracks C, FLTACTS Special Services headquarters, is the hub of many of the department's most popular activities. Here a serviceman or members of his family can find the recreation hall, photo and wood hobby shops and many other facilities.

In this area, also, are the main motion picture theater, the EM club (one of the finest in the Navy), 28 bowling alleys in three separate locations and a large skating rink.

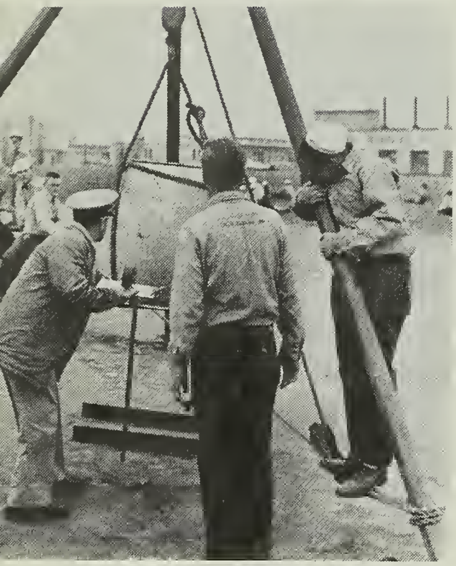
And to top it all off, if none of the above particularly sends you, you just may be an exploring and picture-taking bug. If so, there's something for you too. The Special Services Tours Office will arrange tours to famed Mount Fuji, around and about Tokyo or to any of the several beautiful sea or mountain resort areas.

These are just some of the items that help make a tour at Yokosuka an interesting and rewarding experience, and can make a port call there one to remember in a Seventh Fleet sailor's sea bag of memories of his WestPac cruise.

—Dave Carlson, JOSN, USN.

ROLLING ALONG — Bowlers at Yokosuka have 28 lanes at three locations on which to test their skill

SEA SCOUT ties 'Navy' knot while others salute ensign at Navy base.



ON THE LINE — Sea Scouts man line to see how fast they can hoist a barrel filled with water.

Sea Scouts Join The Fleet

One thousand boy scouts "joined the Navy" for three days to show what they know of boats and the sea.

To the surprise of curious and seasoned U. S. Navymen, the teen-age Sea Explorer Scouts proved to be more than amateurs at pulling oars and rigging sails.

The 14- to 17-year old Scouts were guests at the U. S. Naval Amphibious Base Coronado, Calif., for their three-day annual rendezvous to show what they had learned in the past year of Scouting.

Coming from nine southern California councils, some of the fledgling sailors traveled from as far away as the San Francisco area, 600 miles distant.

After a welcome by their hosts, Vice Admiral Howard A. Yeager, Pacific Amphibious Force Commander, and Capt. H. H. Kait, Amphibious Base Commander, the Scouts "turned to" in rugged contests to vie for Scouting trophies.

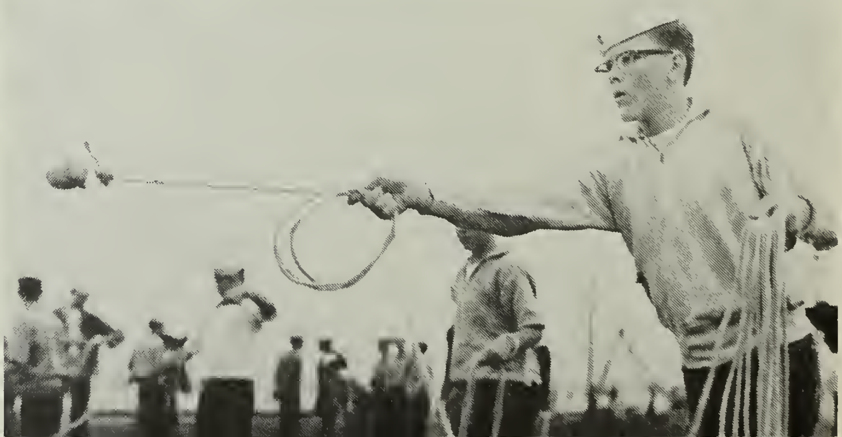
In crews ranging from five to 20 members, they competed in rowing, signaling, knot tying, canoeing, line handling and the like.

The young men relaxed and played at the base gym, bowling alley, recreation center or theater after each day's workout.

On Sunday, the third and last day of the meet, they attended religious services and toured ships and installations at the Amphibious Base, headquarters of the U. S. Pacific Fleet's Amphibious Force.

They enjoyed Navy chow, and they grumbled at being awakened at 0600 by the reveille bugle. In fact, the skilled Scouts came pretty close to becoming old salts.

HEAVE HO — Sea Scouts test their skill at heaving messenger line. *Rt:* Breeches buoy rescue is simulated during the three-day visit.



LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept. Washington 25, D. C.

Face the Music

Sir: What do you do with troops marching away from the colors when morning or evening colors are sounded? Do you halt them in the direction of march without turning them, with the leader turning and saluting for the group, or do you turn them to face the colors or music, leave them at attention or order arms, with the leader saluting for the group?

Navy Regs, Chapter 21, Art. 2106, Para. One, states: "Persons in formation are brought to order arms or called to attention as appropriate. The formation commander shall face in the direction of music or ensign and shall render the salute for his unit."

I find nothing that specifically states that they should face towards the music or ensign. Also, nothing that says they should remain in the direction of march. — R. D., BUCA, USN.

- *Neither "Navy Regs" nor the "Landing Party Manual" mentions troops in formation marching away from the colors at evening or morning colors. Troops are halted and the formation commander faces the colors or music. This is because the angle may be such as to preclude using a standard command to turn the troops. In an evening or morning formation the troops may not all be directly facing the colors but they face in that general direction.*

It would be impolite, to say the least, for a body of troops to stand with their backs to the colors or music while the commander faces them and salutes. So, troops marching away should be halted, turned to the direction most nearly facing the colors or music (company front, or in reverse of original line of march) and the commander should then face in the direction of the colors or music and salute. — Ed.

Navy Musicman

Sir: Who is CDR Charles Brendler and what does he do?

In a recent wardroom discussion concerning the Naval Register, we came upon CDR Brendler's name. He is the only person listed as "Not of the Line nor of the Staff Corps."

The Register also reveals that he has been in the Navy 48 of his 63 years. The listing is on page 666. Perhaps you can clarify this mystery for us. — H.B., ENS, USN.

- *Gad, Sir. We are surprised that anyone with sufficient rank to engage in a wardroom discussion would not recognize the name.*

CDR Brendler, who retired last month, has been either the assistant director or the director of the Navy Band for so long that men who are now grandfathers were wearing knickerbockers when the band, under his direction, broadcast on Saturday mornings from the Sail Loft of what was then the Navy Yard at Washington, D. C.

With the exception of FADM Nimitz, he has the longest period of continuous duty of any officer currently on the active list of the Navy. He enlisted as a landsman in 1913 and served as an enlisted musician in the Navy Band. He moved to solo clarinetist and was serving as assistant leader of the band when he was appointed leader in 1942.

He is being succeeded by LT Anthony Mitchell, USN, who, like CDR Brendler, was formerly an enlisted musician. — Ed.

TAD Expenses

Sir: If, at his own request, a man is ordered TAD to a civilian school in a city where no government messing or berthing facilities are available, and his orders specify "no expense to the government," must he pay food and lodging bills from his own pocket?

In a case in question at our command, the disbursing officer says a man in this position cannot draw per diem because of the "no expense" clause, nor can he draw BAQ or commuted rations. Is this correct? — V.J.M., YNC, USN.

- *Only partly correct. If your TAD scholar accepted an authorization which permitted him to perform travel at no expense to the government, he should not be reimbursed for travel or receive per diem allowances.*

But, if a government mess is not available at his TAD station, he is entitled to basic allowance for subsistence, or commuted rations if the station authorizes separate messing. The Navy Comptroller Manual, *Para. 044025-3, spells this out.* — Ed.

Names Exchanged

Sir: As former Officer-in-Charge of the DD Transfer Team DD797 and the Mobile Training Team ex-*Cushing* (DD 797) I was interested in your story concerning the transfer of *Cushing* and *Hailey* to the Brazilian government in the December 1961 All Hands.

The article was interesting and accurate except that the names were interchanged. Ex-*Cushing* was commissioned as CT *Parana* (D-29) while ex-*Hailey* was commissioned as CT *Pernambuco* (D-30).

The commissioning ceremony took place at Norfolk Naval Shipyard and, after an outfitting period and intensive underway training conducted by the Fleet Training Center, Norfolk, the two ships left for Brazil.

Incidentally, the opportunity to work with a foreign crew was very interesting and rewarding and led, I hope, to a better understanding of the similarities and differences of both navies as well as the problems faced by both. — LT Donald E Prisby, USN

- *Heads were about to roll at* All Hands *until we traced our information back to the source to which we shall refer as usually reliable. If anyone has the straight scoop, it should be you.*

Thank you for your interesting letter. We also feel there is nothing like first-hand contact to further international understanding. — Ed.

Right or Left Hand Hashmarks?

Sir: I would like to call your attention to the picture on the back cover of the November 1961, All Hands. I think if the man painting the hashmark under the "E" checks regulations he will find he is putting it on backwards. The hashmark should extend from upper left to lower right, not upper right to lower left as he is making it.

On the front cover of that same issue you can plainly see the hashmarks are painted correctly on the bridge of the ship pictured there — upper left to lower right. — D.C.G., SMC, USN.

- *We agree that one of the ships you mention has her hashmarks displayed incorrectly, but it's not the ship on the back cover. According to the "BuShips Manual," "When facing the 'E' the stripe should slant downward from the upper right to the lower left, regardless of the side (of the ship) on which displayed" (Article 19.154-5). This is the written word on displaying the "E" hashmark, which also holds true for uniforms. In any case, thanks for bringing this to our attention.* — Ed.

IRON MEN—Navymen of the Civil War pose for photo on the deck of *USS Monitor,* famous for its battle with *Merrimac* in March 1862.

He Sailed on Board Monitor

Sir: My grandfather once told me that he was a crew member in the Federal ironclad *Monitor* during her engagement with the *Merrimac* in Hampton Roads, Va., during the Civil War. Can you verify this?

My grandfather's name at that time was either Peter Wilhelm or Peter Williams. — W. A. Gadd.

• *According to the Naval History Division in the Office of the Chief of Naval Operations, no mention to date has been found of a Peter Wilhelm who served in the Navy during the Civil War. If, however, your ancestor was the Peter Williams, Quartermaster, who was on board* USS Monitor *when she left the New York Navy Yard 6 Mar 1862, you have every reason to be proud of grandpappy.*

This Peter Williams was born in Norway in 1831, and immigrated to Pennsylvania, from whence he enlisted in the U. S. Navy. He became, it appears, quite a steersman — for it was he who piloted Monitor *throughout the epic battle on 9 Mar 1862 in which* Merrimac, *after being damaged, finally retired from the scene.*

For his part in Monitor's *victorious stand, Peter Williams was promoted to Acting Master's Mate just 16 days later, on 25 Mar 1862, and was awarded the Medal of Honor under General Order No. 11, dated 3 Apr 1863.*

Nor did the Williams exploits end there. Later, after the foundering of Monitor, *Acting RADM S. P. Lee, Commander of the North Atlantic Blockading Squadron, in a report to the Secretary of the Navy dated 4 Jan 1863, stated: "Commander Bankhead, CO of* Monitor, *speaks warmly of the good conduct of the officers and crew, with but few exceptions. He warmly praises the deportment of Acting Master's Mate Peter Williams."*

Williams was subsequently promoted to Acting Ensign on 10 Jun 1863, and was honorably discharged from the Navy on 9 Nov 1867. — Ed.

Seavey, Shorvey and You

Sir: I have received orders for this station in the 11th Naval District, which disappoints me greatly. I was not only disappointed, but I now have serious doubts in my mind concerning the effectiveness of the Seavey/Shorvey system. Here are some pertinent facts for background purposes:

1. Chief Radioman — Navy Enlisted Classification Code 2313
2. Active duty base date — October 1948
3. Sea duty commencement date — September 1951
4. Shore duty tours in CONUS — none

On my Seavey request I asked for the following:

1. Vallejo, Calif.
2. New Orleans, La.
3. San Francisco, Calif.
4. Washington, D. C.
5. Class "C" School, Advanced Crypto Repair
6. I also indicated a sincere desire to remain at sea.

It appears to me that a career man with over 10 years' continuous sea duty and over 13 years' active duty would get one of his shore duty requests. At the very least, the Seavey/Shorvey system could have assigned me to one of the naval districts of my choosing.

I realize the needs of the service are paramount, but in the area of each of my Seavey requests, there is a large communication center or facility.

Perhaps my case is an isolated one. Nevertheless, I will be assigned to an undesirable duty station for three years. I now understand why people with ten or more years' active duty consider them wasted years and return to civilian life.

No attempt seems to be made to assign personnel as individuals. For better or worse, I would much rather see the old system back in effect.— [Name withheld.]

• *Your disappointment at not being rotated to a shore station of your choosing is understandable but, Chief, when you start knocking the system for this reason, we are somewhat amazed.*

We have been informed by the Seavey/Shorvey people that a review of the factors associated with your assignment completes the picture you only sketched in your letter.

As you stated, your sea tour commenced in September 1951. On the surface, this appeared excessive. Hence, a review of your past assignments was made.

Your sea duty began with the precommissioning crew of an APA. After spending 11 months on board, you were transferred, at your own request, *to another APA. After 17 months of arduous sea duty, you were transferred ashore for six months of schooling,* at your own request, *thence to overseas shore duty in Japan. Again,* at your own request, *your tour in Japan was extended to 47 months in that area.*

Your next move was to arduous sea duty on board an AVP and, while en route, Seavey was put into effect.

Your Seavey duty preferences indicated a first choice of Japan and a second choice of Formosa. Accordingly, you were ordered to Formosa, since reassignment to Japan could not be justified under the limitations imposed by the "Enlisted Transfer Manual," Article 2.21e. Again, at your own request, *your tour in Taiwan was extended for one year.*

In brief — you've had 38 months on arduous sea duty out of the 10 years' (120 months) duty considered "at sea" for rotational purposes.

Since no further extension overseas could be justified, your name came up for shore duty in September of this year. True, your rotation data card indicated a sincere desire to remain at sea; however, it included the stipulation "on tenders."

If you were sincere in wanting to remain at sea, anytime prior to September you could have initiated a request, in accordance with Article 3.33a of the "Transfer Manual."

Since you did not, and it was time to move, your duty preferences were considered against existing service *needs. Unfortunately, there were no requirements for RMCs (based upon manning level) in your areas of choice; hence the assignment to your present station was made to meet a requirement that did exist.*

As you acknowledge, Chief, the needs of the service are paramount. Accordingly, personal desires for particular areas cannot always be honored. Be assured, it is with sincere regret that a person is assigned out of an area of his choosing.

Although not perfect, the Seavey/Shorvey rotation system is the fairest system yet devised for the greatest number. Although your case is not an isolated one, it falls into a small minority predicated on service needs.

It's been fine for you up to now, so why knock it at all? You're still getting ashore on the same coast and in the same state you gave as first choice. The existing requirement could have been at some place more distant — Cutler, Maine, for instance. — Ed.

BIG DAY ON DDG — Newly advanced crew members of *USS Charles F. Adams* (DDG 2) pose for photo after 65 received promotions.

Takelma *Tops* Takelma

Sir: After reading the article on page 45 of the November 1960 issue of All Hands — "*Takelma* Has Big Pull" — I must write my first letter to an editor.

I raise no question as to the preeminence of *Takelma* over any and all tugs in the U. S. Navy — or any other Navy. Since she was commissioned on 3 Aug 1944, she has occupied the number one spot in my book.

I do, however, take exception to the inference that a mere 5200-mile tow job first placed *Takelma* in the record books.

To the best of my recollection, on 15 Dec 1944 *Takelma* left Eureka, Calif., towing uss *YFD 64* — as large a floating dry dock, I believe, as has ever been towed. After touching base at Pearl Harbor, Eniwetok, Kwajalein and Ulithi, *Takelma* disposed of the tow at Leyte Gulf (off Manicani Island) on 15 Feb 1945. Had *Takelma* followed great circle routes, the distance would have been 6584 miles. The route actually taken was probably closer to 7000 miles.

Lest any other tugboat sailors claim any records over *Takelma*, it is suggested that this, *Takelma's* maiden trans-Pacific voyage, be taken as the mark to beat — not the one described in your November issue, which was merely the latest in the long line of her achievements. — W. J. Murphy, CAPT, usn (plankowner).

- *We are always interested in unusual accomplishments of Navy ships, but we usually avoid verifying any claims as records. Towing is one of the categories we avoid.*

Takelma's *tow is, however, a good long one. You probably know the story well, but each time we hear towing claims, our memories go back to 1905-1906 and to the six-month, 12,000-mile tow of the drydock* Dewey *(July 1961* All Hands*). Even this, we understand, is not now a record tow.*

We aren't trying to belittle Takelma's *claim by mentioning this 12,000 mile tow, because* Dewey *wasn't towed by one ship anyway. When* Dewey *left Chesapeake Bay for the Philippine Islands, a hemp-wrapped steel cable went from the bow of* Dewey *to the collier* Brutus. Brutus *in turn, had a line from her bow to the stern of another collier,* Caesar. *Still another line went to either the tug* Potomac *or to the supply ship* Glacier. *Maybe if you'd divide the total miles towed by three ships you'd still have them beat.*—Ed.

Humanitarian Transfer

Sir: I have several questions concerning the problems a married Navyman could encounter when he's transferred to a temporary station for humanitarian reasons.

Let's say our man is on shore duty at station "A" and is ordered to station "B" for four months' temporary duty for humanitarian purposes. No-cost-to-the-government orders are issued. He moves himself, his dependents and his household effects to station "B" at his own expense.

At the end of the four-month period he is ordered back to station "A" to complete his normal tour of shore duty. During this transfer from "B" to "A," is he entitled to transportation, at government expense, for himself? For his family? Will the government move his household effects?

Now, let's suppose he was not reassigned back to "A" but, instead, received orders to a new station — "C." Would the government pay for this?

Here's another let's suppose. If, instead of being reassigned after four months, station "B" is made his permanent station, what then? — V.J.M., YNCA, usn.

- *If your subject of many moves is reassigned to his original duty station after a four-month humanitarian assignment he is entitled to transportation (at government expense) for himself, but not for his dependents. The government would not pay the cost of shipping his household effects.*

If he were reassigned to other than his original duty station, or "C" in this case, he would receive transportation, at government expense, for himself (from "B" to "C"). His dependents would be entitled to transportation from their location on receipt of orders ("B") to the new duty station ("C") not to exceed the cost that would have been involved in a move from the original duty station ("A") to the new duty station ("C"). The same holds true for his household effects. The government will foot the expenses that do not exceed those had the move been from "A" to "C."

If "B" is made his permanent duty station, he would not be reimbursed for his travel, or his dependents' travel, nor would he be reimbursed for his household effects shipment.

This information is contained in Comptroller General Decision B-139724, which is dated 14 Sep. 1959. Also, Chapter 18 of "The Enlisted Transfer Manual" contains the official word on humanitarian assignments. — Ed.

SIDE BY SIDE — *USS Ajax* (AR 6) sailors man the ship's rails while cruising off the coast of Okinawa.

Visit to Iraq

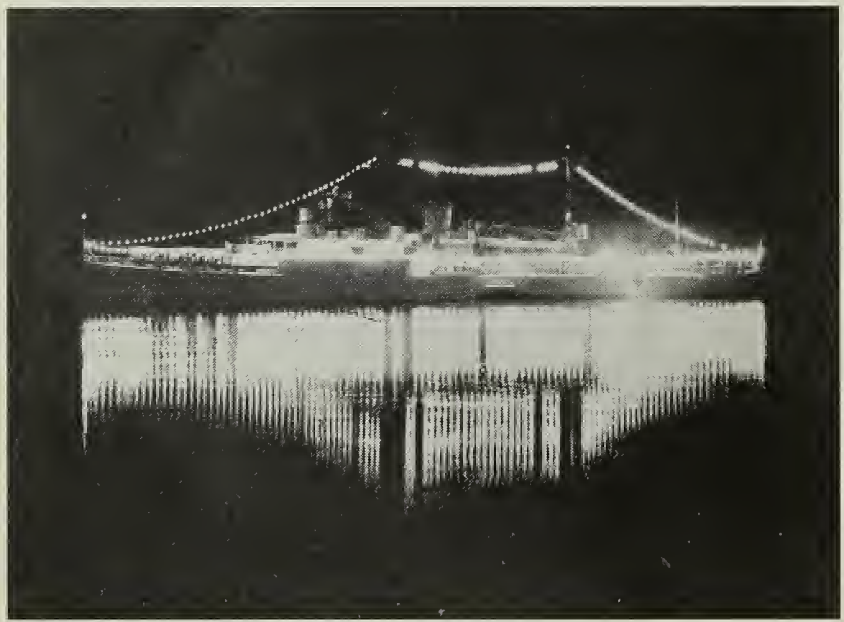
SIR: The inland port city of Basra, Iraq, has been visited by the U. S. Navy only twice. USS *Duxbury Bay* (AVP 38) claims the distinction of having made both visits, the most recent of which took place last 13 and 14 December. Here's the story.

Getting to Basra involves a pleasant trip up the palm- and date-tree-lined Shatt-al-Arab river — a merger of the Tigris and Euphrates — through 85 miles of picturesque countryside.

Our arrival at Basra was noted with a 21-gun salute and display of Iraq's national ensign. A large gathering of the town's citizens was on hand to welcome the ship. Native barges and cargo carriers that suggested Biblical times were all around us. Our big, white ship made a striking contrast.

After mooring we held open house. I'm sure the many visitors were impressed with what they saw while touring the ship. Many official calls were made by Iraqi dignitaries, and by the time the visiting was over, 51 rounds of saluting empties had been neatly stacked on the 01 level.

I think the highlights of this goodwill cruise were the basketball and volleyball games between Iraqi and *Dux* teams. Our men wore uniforms of red, white and blue. The *Dux* representatives played hard, and they played well, but lost both contests by close margins. After the games the president of the Basra Sports Club presented our basketball team a silver cup trophy, and our volleyball squad a plaque featuring the Iraqi national insigne.



HARBOR LIGHTS — *USS Duxbury Bay* (AVP 38) lies moored at Basra, Iraq, and claims to be only U. S. Navy ship ever to visit there.

Back at the ship, meanwhile, *Dux's* appearance was rapidly changing as the crew readied her for an official reception given in honor of Iraqi officials by the Commander, Middle East Forces (*Duxbury Bay* is COMIDEASTFOR flagship). The foc'sle and quarterdeck received some unusual decorations. A variety of Navy flags and pennants were hung around the foc'sle in both horizontal and vertical displays. These were set off by plants which had been presented to the ship by Iraq's Director of Port Administration. In addition, a large, hand-painted Navy seal, bordered with two large Persian rugs, contrasted nicely with American and Iraqi national ensigns displayed on either side.

As the various VIPs boarded the ship they received, literally, a red-carpet quarterdeck welcome. We had laid a 45-foot-long red carpet from the step-off on the accommodation ladder to the midship area of the starboard passageway. This was "railed" with chromed 3-inch projectiles.

After we left Basra and returned to sea a crew's rehash of the visit turned up general agreement that the men had hurdled the barriers of strange customs and language and had made some friends for the U. S.—Douglas L. Murray, BOSN, W-1, USN.

• *Nice going,* Dux. *And thanks for the story, Bos'n.*—ED.

Recording Special Abilities

SIR: I was raised in Honduras, and am fluent in Spanish. I would like to know how I can have this information entered in my service record and the records at the Bureau.

I'm sure there must be some assignments in which I can use my language ability. Can you tell me what they are and how I can go about applying for them?—A. B., BM3, USN.

- *The Navy tries to record all the useful skills and knowledge a recruit brings to the Navy, before he leaves boot camp. There are, of course, instances in which, for one reason or another, this isn't done.*

It is also the Navy's fond hope that Navymen will acquire skill and knowledge other than that which they carried through the boot camp gate.

When a man believes he has an unrecorded capability which will be useful to the Navy and hence to his career all he has to do is write about it to this Bureau.

If it is the type of information the Navy needs, it will be programmed into the Bureau's master personnel tape and will be included, along with the other information about him, each time he comes up for reassignment.

In your case, your language ability is now in the tape.

There are indeed jobs in the Navy in which it is an advantage to know a foreign language. Most of them are found in MAAGs, missions and the offices of Naval Attaches. The "Enlisted Transfer Manual", Chapter VI, covers this subject.

Section 6.31 of the manual shows the ratings used in these billets. According to the manual, there are billets for your rating in grades E-4 through E-7. (Except in unusual circumstances, only chief and first class petty officers are assigned to attache duty).

You will stand a better chance applying for an area, rather than a specific country, since any specific country you request might not have a billet available for your particular rating when you want it.

Other sections of Chapter VI give the requirements for these jobs, the lengths of duty tours and information on how to apply.

WHITE TOP — A lone crewman of *USS Lake Champlain* (CVS 39) makes his way aft on the flight deck after snowstorm off Norfolk, Va.

In the meantime, commanding officers sometimes have need for interpreters when their ships are in foreign ports.

If you are interested, the next time you are in a Spanish-speaking port, volunteer your services.

.Adios y buen suerte. — ED.

E-8 Upon Reversion?

SIR: I served as an ATCA for two years before I was appointed as LDO ensign in July 1958. My status was later changed to permanent Chief Aviation Electronics Technician.

Since BuPers Inst. 1430.7D prohibits administrative advancement to pay grade E-8, is it possible for me to participate in the examination for E-8, and if selected, have my permanent status changed to senior chief? — LTJG H.L.M., USN.

- *No. Temporary officers (or any other officers for that matter) are not eligible to compete for selection to E-8. This is covered in Change One to BuPers Inst. 1430.7D.*

If you are ever involuntarily reverted to enlisted status, however, you would be considered by the Chief of Naval Personnel for the higher rate. — ED.

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Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Oklahoma* (BB 37) — A reunion is scheduled for 5 and 6 May at the Dodge House, Washington, D. C. Further details may be obtained from Edward H. Lutz, 673 Lindley Rd., Glenside, Pa.
- USS *Pennsylvania* (BB 38) — A reunion is scheduled for 21 April at the Commodore Hotel, San Francisco, Calif. Further information is available from Ralph J. Hopkins, Canton, Mo.
- USS *Peiffer* (DE 588) — The fifth annual reunion will be held in Cleveland, Ohio, on 13, 14 and 15 July. For additional information, write to Charles M. McFarland, 1945 Westburn Rd., Cleveland 12, Ohio.
- *302d Seabee Battalion* — The 15th annual reunion will be held at the Sheraton-Biltmore Hotel, Providence, R. I., on 22, 23 and 24 June. For more details, write to Martin A. Lowe, 8441 Bayard St., Philadelphia 50, Pa.
- USS *Bowditch* (AG 30/AGS 4) — All who served on board from 1940 through 1946, who are interested in holding a reunion, are invited to write to H. F. B. Delamorton, RMCS-P2, USN, COMFAIRWING FIVE STAFF, NAS Norfolk, Va.
- USS *Fletcher* (DD 445) — A reunion is planned for those who served on board between 1942 and the end of World War II. For details, write to W. C. Ashley, 109 McDowell St., Greenwood, S. C.
- USS *Natoma Bay* (CVE 62) — A reunion is being planned next July in Tacoma, Wash. All who served on board during World War II may write to Jack W. Graham, 4313 North 36th St., Tacoma 7, Wash.
- *AIR GROUP 19,* USS *Lexington* (CV 16) — A 20th anniversary reunion is being planned for members of Air Group 19 personnel who served on board *Lexington*. For details, write to Max E. Gregg, 111 North Wacker Drive, Chicago 6, Ill.
- *5ND Intelligence Personnel* — A reunion is planned during Oyster Bowl week end at Norfolk, Va. All who served in the intelligence section during World War II, who are interested in attending, may write to C. Lee Spillers, Wheeling, W. Va.
- *Former LTA Personnel* — A reunion is being planned for June or July in Las Vegas, Nev. For more information, write to Jack E. Daseler, 2113 South 17th St., Las Vegas, Nev.

A First for Cimarron

Sir: Even though underway replenishment is a common occurrence in the Fleet these days, we believe USS *Cimarron* (AO 22) has a replenishment "first" to report.

In WESTPAC last December, *Cimarron* rendezvoused with USS *Current* (ARS 22) to replenish her with fuel and water. *Current* was two weeks out of Pearl Harbor, en route to Korea with five Army barges in tow. The total length of the tow was approximately 4650 feet.

Special preparations were necessary before the rendezvous could be made. It was necessary for *Current* to maintain a steady course and speed, and for *Cimarron* to make her approach well clear of the tow wire. This created an inverted condition, in that the receiving ship became guide and the delivery ship kept station.

The *Cimarron* fuel gang rigged the oiler's after station with a 4-inch hose for transferring fuel. Directly beneath this hose, special "saddles" of pipe were constructed to hold a water hose. By using only *Cimarron's* after station, *Current* remained to the port quarter with her tow well clear.

Station-keeping was the next step. The extreme difference in the ships' lengths (*Cimarron*, 553 feet; *Current*, 213 feet) made it impossible for the oiler's conning officer to have a good reference point for speed changes, from his position on the bridge. We solved this problem by stationing a special officer at the fueling station, who recommended speed changes by telephone while course changes originated on the bridge.

The result: A difficult underway replenishment was carried out smoothly and efficiently without incident. The entire operation took about three hours. — Crew, USS *Cimarron.*

- *Until the men of other service ships provide* All Hands *with details of similar accomplishments, we'll let it stand as a "first" in underway replenishment techniques. In the meantime, congratulations to* Cimarron *on her seamanship.* — Ed.

Action in Nuclear Blasts

Sir: The December 1961 All Hands contains an article, "Battle Training Test for Sara" in which one of the accompanying pictures illustrates a countermeasure being taken to lessen the possibility of injury from the shock wave produced by an underwater nuclear detonation. This countermeasure is not correct and might possibly increase the number and severity of personnel injuries.

When an UNDERWATER nuclear detonation is anticipated, all topside and below-decks personnel should hang on to a solid ship structure, with their knees flexed to minimize shock injury. You should never lie prone, as more body area will be exposed to the shock forces transmitted through the deck. Standing with knees flexed will allow the ankles and legs to absorb greater shock forces without injury.

The countermeasures for AIR and SURFACE bursts, however, are different — but only for topside personnel. Men below decks should always remain standing and hang on.

The chart below outlines the recommended personnel evasions for the various types of nuclear weapon bursts.

The following letters A, B and C indicate the countermeasures to be taken as listed in the table:

A — Hands to Face Evasion. Upon receiving a light stimulus (you see the flash or the sky light up) close your eyes and immediately raise your hands to cover your face, dropping to the deck as quickly as possible. Do not use your hands to break the fall; use your legs, hip and shoulder.

B — Stand with knees flexed. Hold on to solid ship structure.

C — Hit the deck. Hold on to solid ship structure.

Topside — Warning

If you're exposed topside and have been warned before the blast:

Burst Type	*Countermeasure*
Air	C
Surface	C
Underwater	B

Topside — No Warning

If you're exposed topside; have received no warning:

Burst Type	*Countermeasure*
Air	A
Surface	A
Underwater	B

Below Decks

If you're below decks; whether or not you have been warned:

Burst Type	*Countermeasure*
Air	B
Surface	B
Underwater	B

— CAPT E. B. Roth, USN,
Commanding Officer,
U.S. Naval Radiological Defense Laboratory,
San Francisco.

- *The "hit the deck" procedure for underwater blasts reported in the December 1961* All Hands *(page 11) is not correct. As Captain Roth has pointed out, lying on deck will not lessen the possibility of injury from the shock of an underwater blast. The procedures shipboard personnel should follow for the various types of nuclear bursts are those the captain has outlined.* — Ed.

SIGNALMAN students learn flashing light and semaphore. Below: Instructor helps repair teletypewriter.

PacFlt's Busiest School

FLEET TRAINING CENTER, Pearl Harbor, Hawaii, doesn't give out bachelors or masters degrees, but does annually graduate more students than any other school in the 50th state.

Housed in a small cluster of sunbleached buildings at Aiea, overlooking Pearl Harbor's East Loch, the Navy Training Center graduates some 14,000 officers and men each year – enough to man 40 destroyers.

The Center's schools offer technical training under simulated battle conditions, using replicas of shipboard equipment. This training is of immediate value because graduates are assigned as specialists to oversee the technical operations on many of the more than 400 ships and air squadrons in the U. S. Pacific Fleet.

The Fleet Training Center at Pearl Harbor offers 54 courses, varying in length from one-half day to seven and one-half weeks, and has given about 8,000,000 hours of instruction to more than 200,000 students during the last 13 years.

FIRE fighting trainees rush into simulated carrier's hangar deck while other students train in simulated CIC.

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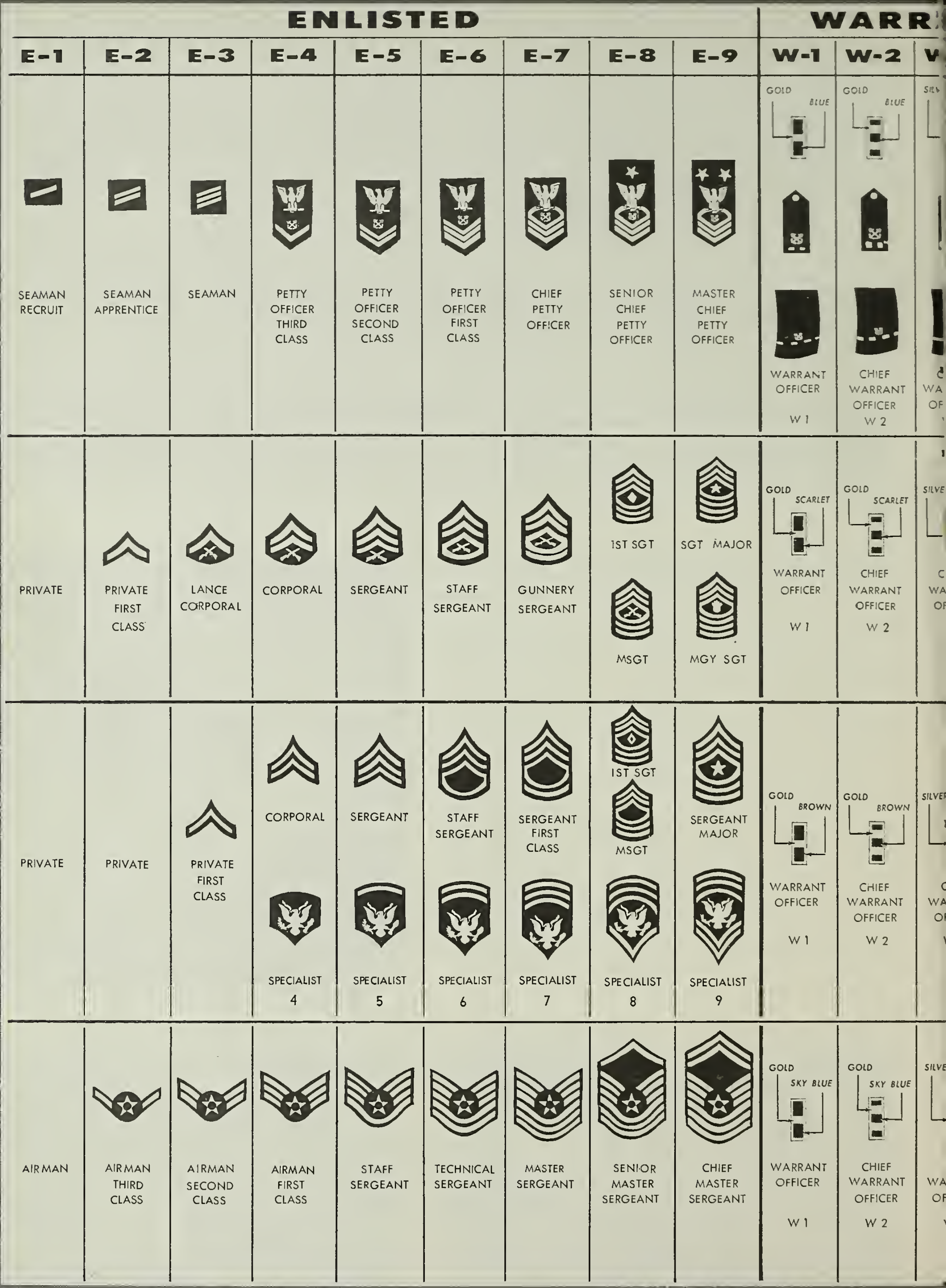

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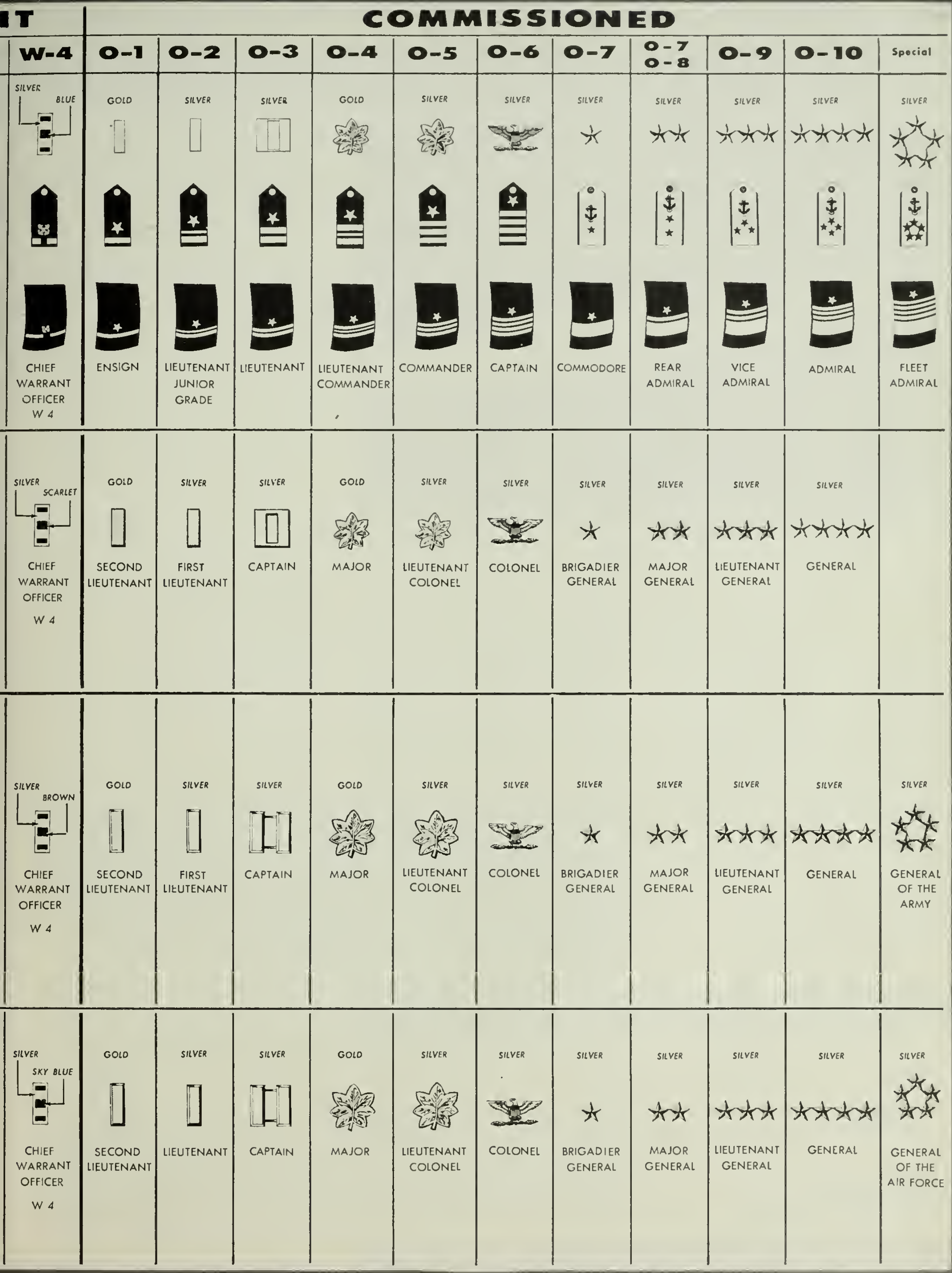
Prepared by ALL HANDS Magazine

STATES ARMED FORCES



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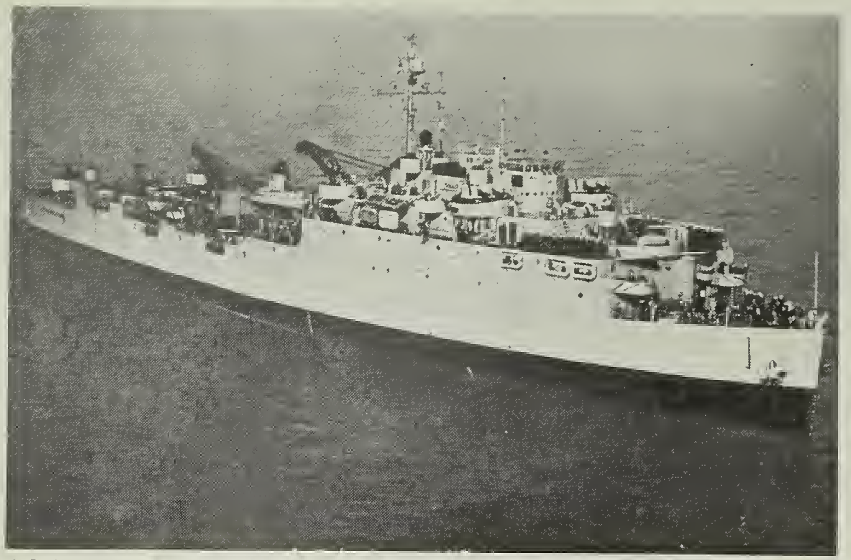
SILVER BLUE CHIEF WARRANT OFFICER W 4	GOLD ENSIGN	SILVER LIEUTENANT JUNIOR GRADE	SILVER LIEUTENANT	GOLD LIEUTENANT COMMANDER	SILVER COMMANDER	SILVER CAPTAIN	SILVER COMMODORE	SILVER REAR ADMIRAL	SILVER VICE ADMIRAL	SILVER ADMIRAL	SILVER FLEET ADMIRAL
SILVER SCARLET CHIEF WARRANT OFFICER W 4	GOLD SECOND LIEUTENANT	SILVER FIRST LIEUTENANT	SILVER CAPTAIN	GOLD MAJOR	SILVER LIEUTENANT COLONEL	SILVER COLONEL	SILVER BRIGADIER GENERAL	SILVER MAJOR GENERAL	SILVER LIEUTENANT GENERAL	SILVER GENERAL	
SILVER BROWN CHIEF WARRANT OFFICER W 4	GOLD SECOND LIEUTENANT	SILVER FIRST LIEUTENANT	SILVER CAPTAIN	GOLD MAJOR	SILVER LIEUTENANT COLONEL	SILVER COLONEL	SILVER BRIGADIER GENERAL	SILVER MAJOR GENERAL	SILVER LIEUTENANT GENERAL	SILVER GENERAL	SILVER GENERAL OF THE ARMY
SILVER SKY BLUE CHIEF WARRANT OFFICER W 4	GOLD SECOND LIEUTENANT	SILVER LIEUTENANT	SILVER CAPTAIN	GOLD MAJOR	SILVER LIEUTENANT COLONEL	SILVER COLONEL	SILVER BRIGADIER GENERAL	SILVER MAJOR GENERAL	SILVER LIEUTENANT GENERAL	SILVER GENERAL	SILVER GENERAL OF THE AIR FORCE

TODAY'S NAVY



ACTIVE AGAIN — The dock landing ship *USS Ashland* (LSD 1) was recommissioned in November at Little Creek Naval Amphibious Base.

Missile Destroyer

A new addition to the Atlantic Fleet is USS *Sellers*, a 431-foot, 3370-ton guided missile destroyer (DDG 11). She is the first ship named in honor of ADM David Foote Sellers (1874-1949), a former Judge Advocate General, Superintendent of the Naval Academy and Commander in Chief, U. S. Fleet.

The new ship, constructed at Bath, Maine, employs an automatic combustion control system in her engineering plant, is capable of 30-knot-plus speeds, and can develop 70,000 horsepower.

Her manpower count is 20 officers and 330 enlisted men.

Sellers' main armament consists of *Tartar* guided missiles and *Asroc.* These batteries are backed up with 5-inch guns and triple-tube torpedo launchers.

ADM Sellers, the man for whom the new ship was named, served on active duty for 48 years (1890-1938). He encouraged the development of a now popular method of battle training under realistic conditions. ADM Sellers served on board USS *Philadelphia* during the Spanish-American War and *New York* during the Samoan Campaign and Philippine Insurrection, and commanded *Wisconsin* and *Agamemnon* during World War I. The Admiral died at the Naval Hospital, Bethesda, Md., on 27 Jan 1949.

YESTERDAY'S NAVY

On 1 Mar 1942 U. S. Navy aviators sank their first German submarine of World War II. On 2 Mar 1799 the Navy pension fund was created. On 3 Mar 1849 three small naval vessels were authorized to test new ocean routes. On 3 March 1860 50 sailors and Marines landed from *USS Marion* at Kisembo, Africa, to protect American property. On 19 Mar 1776 Congress authorized the fitting out of armed vessels to cruise on enemies of the United Colonies. On 27 Mar 1794 Congress authorized the construction of four frigates. On 20 Mar 1922 the Navy's first aircraft carrier, *USS Langley*, was commissioned at Norfolk, Va.

Returning to the Fleet

Last month ALL HANDS ran a list of ships being recommissioned. Here are reports on a few more:

- USS *Cheboygan County* (LST 533) — *Cheboygan County* was recommissioned at Jacksonville, Fla., last November. She now serves with the Atlantic Fleet Amphibious Force as a unit of Amphibious Squadron 12.

The LST's history notes that during the Normandy invasion of WW II she made 42 trips across the English Channel as a hospital ship, transporting casualites to England.

- USS *Sabine* (AO 25) — Another war veteran called up from mothballs is the oiler *Sabine.* She was recommissioned at Brooklyn last December.

Sabine, first commissioned in 1941, participated in many World War II operations, including the invasions of Guadalcanal, Okinawa and Iwo Jima. She was mothballed at Orange, Tex., in 1956.

The oiler will be assigned to the Atlantic Fleet's Service Squadron Two, and will operate out of Mayport, Fla.

- USS *Kennebec* (AO 36) — Kennebec was also recommissioned at Brooklyn last December, and, like *Sabine,* will be assigned to SERVRON Two in the Atlantic. She has a crew of 15 officers and 223 enlisted men.

Kennebec was first commissioned in 1942. She was one of the oilers which supported the World War II U. S. invasion fleet off Algiers and Morocco.

Guided Missiles for DEs Too

The first DE type ships to be equipped with guided missiles will be in a class of their own, the DEG, or guided missile escort vessel.

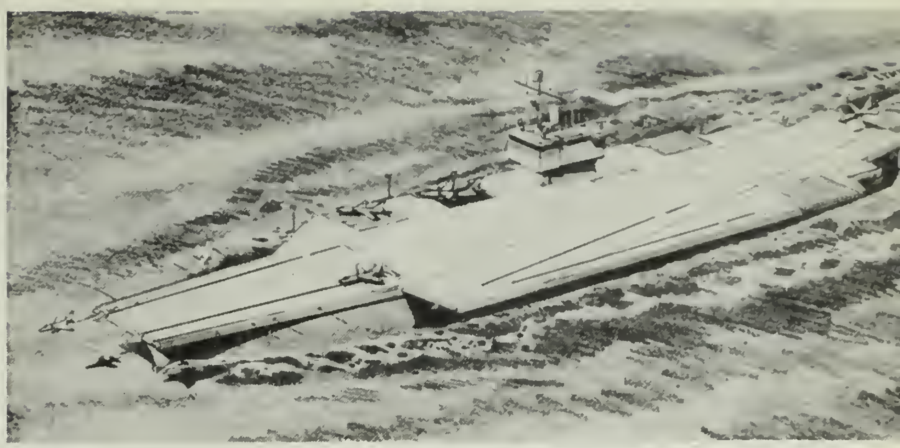
DEGs will be introduced to the Fleet in late 1965 when three ships now under construction at Seattle, Wash., are placed in commission.

The three ships will be armed with solid-fuel *Tartar* surface-to-air missiles.

The DEGs are designed to operate with hunter-killer groups, protect amphibious forces, patrol coastal areas and escort convoys. They will be 415 feet in length, and will be 44 feet across the beam. Their full load displacement will be 3400 tons.

In addition to the *Tartar* antiaircraft missiles, the DEGs will be armed with *Asroc* antisubmarine rocket launchers and 5-inch guns. Drone helicopters and long-range sonar will aid in sub detection.

Names have not yet been selected for the new ships.



ON THE WAY—Artist's conception shows how aircraft carrier *USS America* (CVA 66), now under construction at Newport News, will look.

Four DLGs in PacFlt

You've got to be better than good to impress Pacific Fleet destroyermen — and they're mighty impressed these days by the performance of the four guided missile frigates serving alongside them in the First and Seventh Fleets.

The four — USS *Coontz* (DLG 9), *King* (DLG 10), *Mahan* (DLG 11) and *Preble* (DLG 15) — are proving themselves to be invaluable assets in CINCPACFLT's domain.

The DLGs are designed to serve primarily as antiaircraft and antisubmarine warfare ships. As such, a good share of their present efforts are directed toward the task of screening and escorting high-speed carrier task forces. They could also be used, however, to screen slower merchant ship convoys, support amphibious operations, or conduct independent operations against enemy forces.

Armed with surface-to-air *Terrier* guided missiles, *Asroc* rockets and dual purpose 3- and 5-inch guns, the 4700-ton frigates are equally prepared for aerial, surface or subsurface action.

An elaborate electronic detection and fire control system supports these weapons, and serves as the eyes and ears of the ship. Long-range radar and sonar are responsible for initial contact. Once the target moves into range, separate fire control systems plot its movement for the different weapons.

Despite all of the emphasis on armament, however, crew comfort and well-being hasn't been ignored on the guided missile frigates. Foam-rubber mattresses, full-sized lockers, individual reading lights, daily movies and an ice cream machine are just some of the items which help make DLG service with the Pacific Fleet good duty.

BACK TO DUTY — *USS Earl B. Hall* (APD 107) was recommissioned at the U. S. Naval Amphibious Base, Little Creek, Va., in late November.

Carrier To Be Called *America*

The name *America* has been selected for the attack aircraft carrier CVA 66 being built at Newport News, Va.

The keel of the Navy's newest carrier was laid 9 Jan 1961. It is scheduled to be launched in the fall of 1963 and commissioned in the fall of 1964.

The name *America* has previously been carried by three U. S. Navy ships.

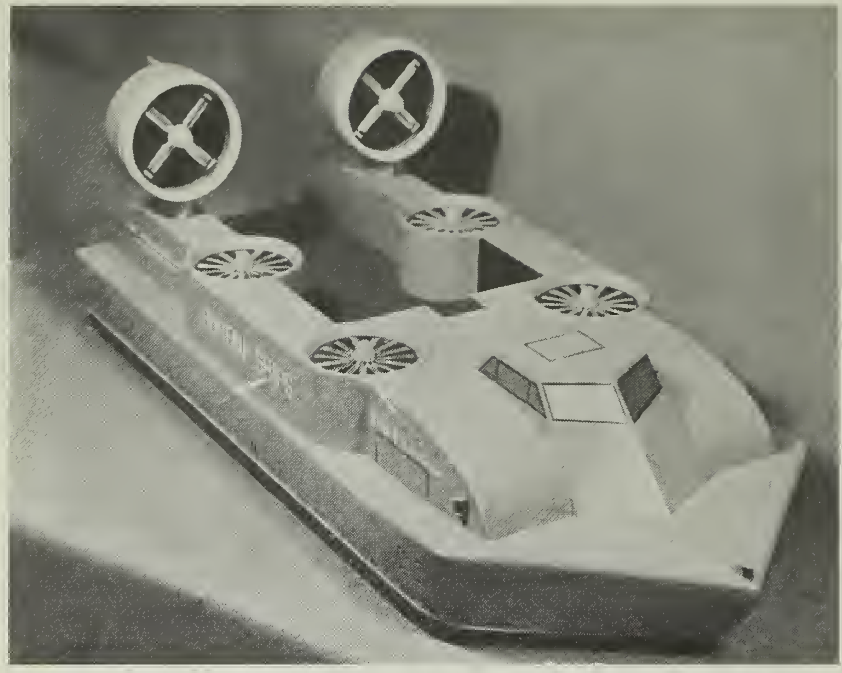
The first was a 74-gun ship-of-the-line which was presented to France in 1782, near the end of the Revolutionary War. The second to bear the name was a racing schooner taken over by the Navy in 1862 during the Civil War. The third was the German liner *Amerika,* which was acquired by the Navy in 1917 and placed on transport duty during the rest of World War I as *America.*

Guided Missile DD Squadron

A destroyer division comprised entirely of guided missile ships is now active in the Atlantic Fleet. The new unit is *DesDiv* 182, which operates out of Norfolk, Va. Ships of the division are the guided missile frigates USS *Dahlgren* (DLG 12) and *William V. Pratt* (DLG 13), and the guided missile destroyers *John King* (DDG 3), *Sampson* (DDG 10) and *Lawrence* (DDG 4).

Dahlgren and *Pratt* are armed with *Terrier* surface-to-air missiles. The DDG's carry *Tartar* missiles, which are also of surface-to-air design. In addition, the five ships are equipped with *Asroc* antisubmarine rocket systems.

Dahlgren is the division flagship.



SPEEDY—Model indicates appearance of hydroskimmer to be built for Navy. Will travel on smooth water or flat land at over 70 knots.

Canadian, U. S. Sailors Meet

The submarine tender USS *Howard W. Gilmore* (AS 16) was the perfect host when HMCS *Bonaventure* arrived at the Naval Base, Charleston, S. C.

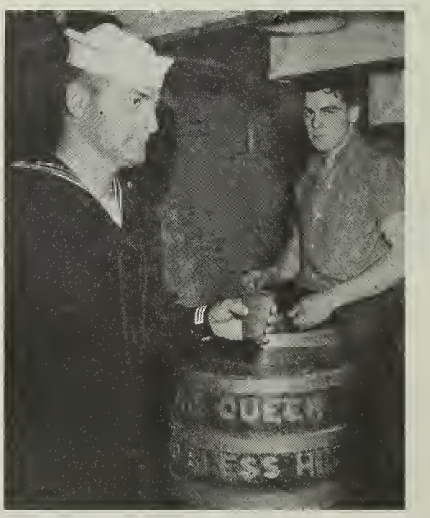
Less than two hours after the Canadian antisubmarine carrier moored, 150 men from *Bonaventure* were aboard *Gilmore* for a lunch of steaks to order, french fries, a choice of several vegetables, assorted salads, hot rolls, coffee, tea, milk and ice cream and cake for dessert. The Canadian visitors also toured the large tender.

Bonaventure reciprocated by inviting 150 *Gilmore* crew members aboard for a Canadian lunch and a tour of the carrier. The menu that greeted the men from *Gilmore* featured tomato soup, halibut steak, beef and vegetable pie, assorted salads, pastries and maple walnut sundaes for dessert.

For the *Gilmore* men, there was something extra during their visit to the Canadian carrier. There was the traditional grog call held daily aboard ships of the British and Canadian navies. The exchange luncheon gave them an opportunity to see this tradition in operation.

The exchange luncheon was only part of *Gilmore's* program to entertain the visitors from the north. The Canadian navymen were invited to parties and dances and taken on tours around Charleston. Many of the married men from *Gilmore* also invited guests from *Bonaventure* to their homes to spend an evening.

The *Bonaventure* - *Gilmore* relationship was one of several that existed at Charleston about this same time. *Bonaventure* was one of 17 Canadian ships visiting the port of Charleston after antisubmarine training exercises conducted with units of the U.S. Navy in the Caribbean Sea. Each of the ships was hosted by a Charleston-based U.S. Navy ship during the visit.



AMERICAN Navyman visiting Canadian ship passes grog barrel on way to soft-drink machine.

Hydroskimmer Research Craft

Additional details of the Navy's new 22-ton hydroskimmer research craft have been released.

The vehicle will travel on a cushion of air over smooth water and flat land surfaces at speeds in excess of 70 knots. Test runs will be made on the Niagara River and Lake Erie.

The aluminum-hulled hydroskimmer will be 62 feet long, 27 feet wide and have an over-all height of 21 feet. An open cargo deck at the after end of the hydroskimmer will provide space for approximately five tons of payload. It will carry fuel for operation at full power for two hours.

Four air-cushion fans, mounted horizontally in the hull, will provide the lift needed to rise from the surface. It will hover at a height of slightly more than two feet.

Two propellers, mounted in ducts on the after deck, will supply thrust to drive it over the surface. Aerodynamic rudders, located in the slip stream of the propellers, will provide yaw control.

Fleet Performs Off California

Some 18,000 U. S. First Fleet Navymen and First Marine Division Leathernecks, 39 ships, and aircraft from carrier squadrons and the Third Marine Air Wing combined forces to stage a four-phase, seven-hour-long Fleet exercise off the Southern California coast.

Chief of Naval Operations ADM George W. Anderson, Jr., USN, and attaches from 26 foreign countries were among interested observers witnessing the show from vantage points aboard USS *Kitty Hawk* (CVA 63).

Highlights included:

An antisubmarine warfare drill, during which the submarines *Blueback* (SS 581) and *Sargo* (SSN 583) acted the part of enemy intruders, and which wound up with the firing of an *Asroc* (AntiSubmarine Rocket) by the guided missile destroyer *Henry B. Wilson* (DDG 7); the destruction of an F9F drone with *Terrier* surface-to-air missiles launched from the guided missile cruiser *Topeka* (CLG 8); an aerial demonstration involving more than 40 planes, all of which were catapulted from *Kitty Hawk's* deck in less than 20 minutes; and a full-scale amphibious assault near Camp Pendleton.

AOE Is Versatile, Mobile

A radically new and different kind of Fleet oiler is now under construction at the Puget Sound Naval Shipyard, Bremerton, Wash. When she joins the Fleet some two years hence she'll signal the beginning of a new era in the replenishment at sea field.

AOE 1 (she hasn't been given a name as yet) will be as completely different from the current crop of underway replenishment ships as the nuclear submarines are from the pre-World War II R and S boats.

In the first place, she'll be bigger — much bigger. With a full-load displacement of more than 50,000 tons, a full-load draft of 38 feet, and a length of almost 800 feet, AOE 1 will definitely rank in the capital ship class. She'll be larger, as a matter of fact, than any of the battleships except for those of the *Iowa* class.

Just as impressive will be her speed and horsepower. Top speed of the AOE will enable her to operate in the vicinity of an attack carrier striking force.

All of this size and speed will be necessary, too, if AOE 1 is to fulfill her future mission.

Unlike current Fleet oilers, she'll be a multi-product carrier designed to operate as an integral part of a strike force, rather than as a unit of an underway replenishment group. She'll stock the fuel, stores, ammo and provisions presently carried on several different types (AOs, AKs, AFs, AEs, AKSs, etc.). And with a cargo-fuel capacity greater than that of the largest Fleet oilers, plus her increased speed and cruising range, she will serve to extend the operating radius and combat ability of the striking forces.

This fast combat support ship will contain a raft of advanced labor-saving equipment designed to reduce manual labor and speed up handling time.

Materials other than missiles and special weapons will be moved up and down by elevators or conveyors. Horizontal movement of general cargo and ammunition will also be mechanized through the use of pallet transporters and fork lift trucks.

UP FOR PROMOTION — Richard Thompson, SN, of *USS Kittiwake* (ASR 13), is advanced to second class diver at La Spezia, Italy.

The missile and special weapons handling system will be separate from the cargo handling system. Those items will be transported by an overhead crane and conveyor arrangement, permitting a continuous flow of missiles from the cargo holds to the missile-transfer system, port or starboard.

Although the missile-handling system will not be automatic, it will be fully mechanized. Each missile will be under positive control at all times; no manual labor will be required.

For external cargo handling, AOE 1 will be equipped with rotating cranes (both port and starboard) to assist in loading or offloading the ship where shore facilities are not available.

Long Beach in Europe

USS *Long Beach* (CGN 9) became the first nuclear-powered surface warship to visit Europe, when it arrived in Bremerhaven, Germany in mid-January.

Since her commissioning in September, she has logged more than 24,000 miles off the Atlantic seaboard and in Caribbean waters.

Long Beach is armed with *Terrier* and *Talos* surface-to-air missiles, and *Asroc,* an antisubmarine rocket.

Twin nuclear reactors power the 15,200-ton *Long Beach.* She carries 77 officers and 979 men on her European deployment.

Deep Down Garden

Sailors aboard *Polaris* submarines are developing green thumbs hundreds of feet below the ocean's surface. As a fresh vegetable salad can become a scarce commodity during a 60-day submerged tour of duty, the men are growing their own common garden variety of vegetables.

The vegetables are being grown in hydroponic garden kits and shipped to the submariners at their Holy Loch anchorage in Scotland.

Each kit consists of three-foot planters with seeds, fluorescent lights and a chemical growth base.

The submariners can figure on growing ruby lettuce in three weeks, dwarf peas and carrots in about a month. They'll be garden fresh.

DEEP GREENS — William D. Cox, CS2, USN, looks over a fresh crop of vegetables growing on the submerged *USS Ethan Allen* (SSBN 608).

AT NORFOLK—Foreign navymen study navigation and instructors check torpedos at FleTraCen schools.

FTC NorVa Schools

In an age of push-button warfare the thoroughly trained Navyman remains, more than ever, an absolute necessity. On the eastern seaboard of the U. S., a good share of that training is provided by the Fleet Training Center, Norfolk, Va.

FLETRACEN Norfolk's seven schools offer a total of 71 courses, varying in length from half a day to 12 weeks. It also provides underway and precommissioning training, and conducts daily drills in communications, radiotelephone and electronic countermeasures for all Second Fleet ships in the Hampton Roads area.

All this adds up to a considerable amount of Navy-style pedagogy—more than 37,000 courses of training provided in fiscal 1961 alone, for example—and it requires the full-time services of some 33 officers and 195 enlisted men, with 24 of the officers and 143 enlisted men serving as instructors.

FLETRACEN's seven designated schools are: Antisubmarine Warfare; Combat Information Center; Communications; Undersea Weapons; Damage Control; Fire-Fighting; and Leadership. Oldest of the lot is Fire-Fighting, established by the Bureau back in 1942. Most recently instituted activity is the Underway Training Department, shifted here in 1956 when the Chesapeake Bay Fleet Training Group was disestablished.

Fire-Fighting School trains Fleet personnel in both fire prevention and fire-fighting techniques. It also conducts classes for shipyard, volunteer and nearby municipal fire departments in the special problems that are included in shipboard and aircraft fire-fighting.

Damage Control instructs its students in repair procedures designed to keep a ship afloat despite almost any sort of trouble. It also furnishes training in shipboard atomic, biological and chemical warfare defense.

ASW School students receive training in detection, attack and kill procedures against enemy submarines, with much of this training centering around a recently installed, million-dollar *Asroc* trainer—the only one of its kind now in operation in the United States. Officer of the Deck refresher and loran navigation courses are also provided.

CIC School ranges from the basic fundamentals to the complexities of electronic countermeasures and air control. Daily lectures and mock-up training are supplemented by frequent live drills.

Undersea Weapons School teaches both operation and maintenance of torpedoes aboard submarines and destroyers, and leans heavily on safety precautions instruction. Courses cover routine upkeep, preparation for firing (including preliminary and final adjustments) and post-run treatment.

Communications School helps the radioman take the kinks out of his operating technique, improves his typing and, in addition, improves his knowledge of operator-type maintenance and adjustment procedures. This is done through classroom discussion, instructor demonstration and actual performance on typical shipboard equipment.

Leadership School, open to PO3 through CPO, is designed to revitalize and re-emphasize the petty officer's responsibilities for leadership, as outlined in General Order 21. Classes for this five-day course are limited to 20, with both group discussion and problem-solving instruction provided.

More than 50 ships have received pre-commissioning training at FLETRACEN Norfolk, including Service Force, Mine Force, Amphibious Force, Destroyer Force, Naval Air Force and MAP vessels. During the past fiscal year, for example, ships receiving this training ranged from two Brazilian destroyers to the nuclear-powered aircraft carrier USS *Enterprise* (CVAN 65).

Underway Training, meanwhile, provides underway refresher and shakedown training for both U. S. and allied nations' ships. Ship riders aid and guide ships' crews in conducting drills and exercises, both alongside the pier and at sea. Upon completion of this training, ships are given an Operational Readiness Inspection (ORI) measuring their ability to operate effectively under battle conditions.

—C. W. Allen, RDCM, USN.

Thirty Missile Frigates

The Navy has awarded contracts for construction of three new guided missile frigates (DLGs).

Two will be built in Bath, Maine, the other in San Pedro, Calif. The ships will be very similar to those built earlier. They will be able to operate independently or as units of tactical strike forces. They will be armed with *Terrier* surface-to-air missiles as well as conventional ordnance and will have a newly developed sonar and the latest command control and communications equipment, including the Naval Tactical Data System (NTDS).

These contracts bring to 30 the guided missile frigates authorized, under construction or completed.

SCHOOL BLAZE—Fire-fighting students hold drill and radio school gives code practice at FTC Norfolk.

Guardfish's Last Job

Few ships find dignity in death
and slide majestically beneath
the billowing
covers of the sea . . .
Most end their days in degradation . . .
and dismantling.
—Sanford Sternlicht (in *Gull's Way*)

Poet Sternlicht (a former Navyman) and other Navy romanticists may view as good news the manner of disposal of USS *Guardfish* (SS 217), a World War II sub stricken from the Navy list late last year because her usefulness in modern "fleetniques" did not match the money it took to keep her in operating condition.

As her last service, *Guardfish* was the target in tests of a new torpedo; studies of which will help measure the weapon's effectiveness.

When the torpedo hit, *Guardfish* was under way, powered by one of her four main diesel engines. (A small crew had her headed on a straight course, then evacuated to another ship.)

USS *Dogfish* (SS 350) and USS *Blenny* (SS 324), of SUBRON 8 at Groton, Conn., delivered the new weapon.

Guardfish was commissioned at Groton on 8 May 1942. During World War II she sank 19 enemy ships, one of which (a cargo transport) she hit with a torpedo fired from a distance of more than three miles. (The explosion, her crew reported, was heard 7 minutes and 27 seconds after firing.)

Twice *Guardfish* was awarded the Presidential Unit Citation and, by war's end, she had patrolled in enemy zones 12 times.

When given the nod for target duties the old sub was based at New London, Conn., as a Reserve training ship. USS *Manta* (AGSS 299) has replaced her there.

Floating Post Office

The Navy's USS *Ranger* (CVA 61) carries as many men on board as can be found in many an American town. Probably this floating population writes and receives more letters than the average group of citizens. *Ranger's* postal clerks claim this isn't just a probability. They maintain it's a cold, hard fact.

By way of proving their claim, the *Ranger's* eight PCs point to the one million dollars in postal money orders they write each year. Daily pickup and delivery of mail is made by helicopters which deposit between six to eight hundred pounds of first class and air mail with each trip. Outgoing mail averages 2500 letters.

Ranger's PCs don't worry about rain, sleet or fog stopping them on their appointed rounds. The only thing that bothers them occasionally is that blizzard of white envelopes.

Speed of Sound in the Sea

Navy researchers have brought to the surface some new facts and figures on underwater sounds. Scientists at the Naval Ordnance Laboratory, White Oak, Md., have measured the speed of sound through waters of varying temperature, pressure and salt content, and Navy and civilian researchers in California have teamed up to study the horizontal refraction of sound (how much it bends) as it passes through water.

The White Oak group studied sea water from the Bermuda-Key West, Fla., area, where the ocean is comparatively salty. In all, 747 measurements were made at 15 different temperatures, representing the entire spectrum of known ocean temperatures, and at eight different pressures, down to five miles.

The NOL findings have been compiled into a reference guide which, the Navy Hydrographic Office thinks, is the most comprehensive and accurate study of its type.

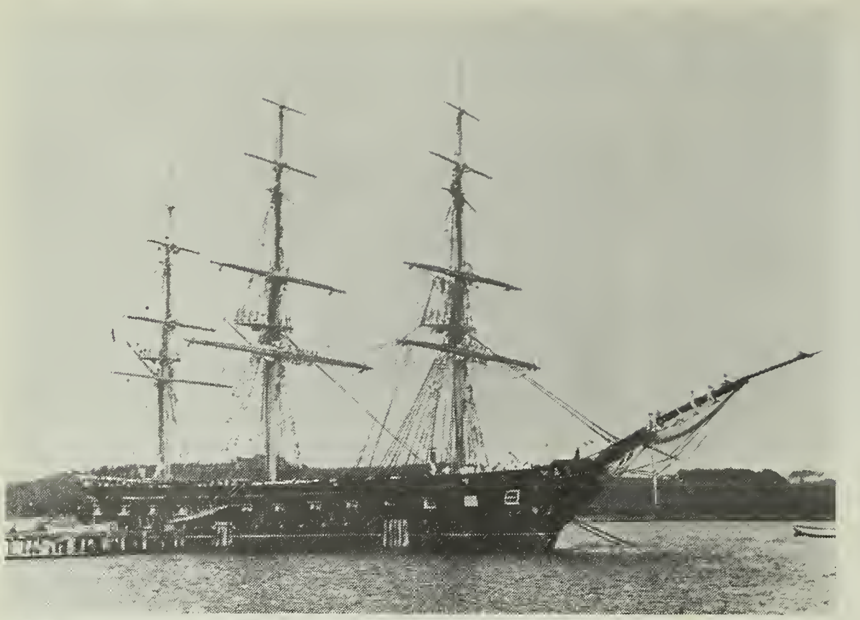
In California, the private research ship *Sea Quest* and a Navy landing craft conducted operations off San Diego in search of underwater sound wave refraction data. The experiments were conducted in the oceanic front formed by the convergence of San Diego estuary water and the water of the open sea. The results should help to determine the accuracy of Navy sonar devices.

Whirling Speed King

The title of speed king was again claimed for the Navy's HSS-2 *Sea King* after it made a three-kilometer (1.86 miles) dash at 199.01 miles per hour.

CDR Patrick L. Sullivan, USN, was pilot of the copter and CAPT David A. Spurlock, USMC, was copilot during the record-breaking flight.

The HSS-2, a boat-hulled turbocopter which has served in Fleet antisubmarine squadrons since September, is no stranger to high speeds (for choppers). Earlier, it set three other new marks at varying distances, ranging from 175.3 miles per hour for 1000 kilometers to 182.8 miles per hour for 100 kilometers, earning four of the five major world speed records for helicopters. The fifth was made by a Russian Mil-6.



ONE OF TWO — Here's how first *USS Constellation* looked. She was active in five wars during her busy career of nearly 160 years.

The First Constellation

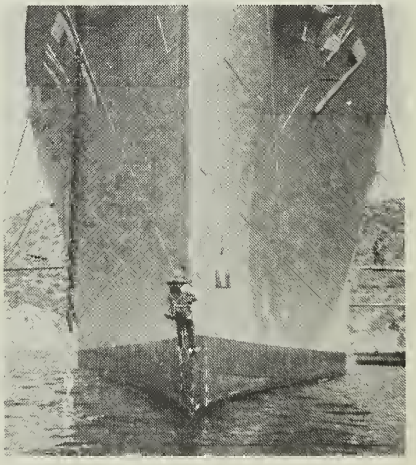
The Navy's first *Constellation* was an object of admiration from the moment of her launching. Even after she had served 35 years in the Navy, a young member of her crew remarked on the general harmony of her proportions, and decided that she was one of those happy first productions never afterward surpassed.

Shortly after outbreak of the undeclared war with France, when a defeat could have been a crushing blow to the newly-born U.S. Navy, *Constellation* captured the 40-gun French frigate *L'Insurgente* in February 1799 after a furious sea battle off Nevis in the West Indies. Generally conceded to be one of the fastest warships afloat, *L'Insurgente* brought *Constellation's* crew $84,500 in prize money – an even tidier sum in 1799 than it is today. This was the commencement of a fabulous career of nearly 160 years in the Navy which would see *Constellation* active in five wars and gain her everlasting affection in the hearts of Americans. Under Captain Thomas Truxtun, she also began a tradition of discipline and organization which endured as the firm basis by which the U.S. Navy has grown to preeminence. Her fast-sailing qualities were apparent when she first went to sea. Here, in the Caribbean, armed French privateers and warships came to respect her as the "Yankee Race Horse."

L'Insurgente's capture so delighted the infant United States that *Constellation's* crew received considerable acclaim, and its members were honored in songs, celebrations and paintings.

About a year later, *Constellation* came out victorious in a spectacular night battle with the 52-gun French frigate *Vengeance* who twice struck her colors, but managed to draw away in a sinking condition under cover of the night. Hardly an inch of her hull escaped the terrible effect of shot and shell from *Constellation* who was unable to pursue and take possession, owing to her mainmast being shot away. Thus, the victor was cheated of her prize. *Vengeance's* skipper later had some words to say about *Constellation's* gunnery. It was "Superbe et grande."

SUSPENDED — Crewman of the seaplane tender *USS Currituck* (AV 7) applies new paint to bow.



The year 1802 found *Constellation* serving the Mediterranean Squadron which sought to eliminate depredations being inflicted by pirate ships of the Barbary States. She assisted in the blockade and bombardments of Tripoli, protected American shipping from Barbary cruisers throughout the Mediterranean, and transported Marines and diplomats from Derne on conclusion of the victorious and remarkable fleet-shore operations against Tripoli. She was also a part of the squadron movement against Tunis which culminated in peace terms concluded in August 1805. Returning home a few months later, she was "in ordinary" much of the time until our second war with England when she was dispatched to Hampton Roads. Here she was blockaded by an imposing British fleet, but turned frustration into success by stationing herself between the enemy and Craney Island where she thwarted every British attempt to destroy the fort or capture the ship.

The Treaty of Ghent closed this war as *Constellation* faced the renewal of naval action against the Barbary States, who had enriched themselves during our struggle with England. In the Mediterranean Squadron of Stephen Decatur, she joined four other ships in the capture of the 46-gun Algerian frigate *Mashuda* in June 1815. She continued to take part in demonstrations of U.S. naval strength which enabled Decatur to extract treaties of peace from Algiers, Tunis and Tripoli, remaining in the Mediterranean to enforce these treaties until late 1817.

After her forays against the pirates of Barbary, *Constellation* looked after American interests in South America, the Mediterranean and China.

The decade of 1840 brought *Constellation* a circumnavigation of the globe. As flagship of the East Indian Squadron, she safeguarded American lives and property against loss during the Opium War and was instrumental in carrying out the successful preliminary negotiations for our first commercial treaties with China. On her way home in May 1843, she reached the Hawaiian Islands in time to express American disapproval of impending foreign annexation. Local rule was soon restored and she continued her journey home by way of South American ports.

Constellation was rebuilt as a 22-gun sloop of war in 1854 and cruised the Mediterranean for three years following recommissioning on 28 Jul 1855. She then protected American shipping from illegal search on the high seas in waters off Cuba before acting as flagship of the African Squadron in the suppression of the slave trade. Detached several months after outbreak of the Civil War, she safeguarded merchant ships in the Mediterranean against attack by Confederate cruisers and privateers until late in 1864, when she returned to Hampton Roads by way of the Gulf Coast.

From 1865 to 1926, the frigate was in and out of commission, performing duties as a training ship for midshipmen, supply ship in the Mediterranean, mercy ship carrying supplies to Ireland during a famine and transport for the Paris and Columbian Exhibitions.

During World War II, President Roosevelt revived her as a flagship of the Atlantic Fleet. After the war, the old ship rotted in Boston for lack of rehabilitation funds.

In 1955 a group of patriotic citizens in Maryland took custody of *Constellation* from the Navy and have been restoring her as funds could be raised. The gallant old warship, America's oldest afloat, is well along toward restoration, but funds are still needed.

Medals from copper spikes removed during Constellation's restoration are being made available as one method of providing part of the needed sum. Donations of a dollar addressed to *Constellation,* Baltimore, Md., will enable the donor to get one of the medals, which is also a life-time pass to the frigate.

SWINGING OUT — 'Roadrunners' of USS *Bon Homme Richard* (CVA 31) play during carrier carnival that added $2000 to ship's charity drive.

Carnival Aboard *Bonnie Dick*

The Navy's physical fitness program and the United Givers Fund both received a boost aboard USS *Bon Homme Richard* (CVA 31) recently amid the sounds of circus music, the chant of barkers and the smell of hot dogs and popcorn.

A day-long carnival was held at sea for three reasons: To add to the $6000 already donated by *Bonnie Dick* to the United Givers Fund, to put emphasis on the Navy's physical fitness program, and - - - - just for fun.

The carnival had most of the appearances of one that might have been seen anywhere in the United States. Scores of booths, challenging the skill and imagination of the crew, lined the hangar deck. Wheels spun, balls rolled and darts flew; all for charity, fun and physical fitness. Preliminary reports indicate the carnival alone added nearly $2000 to the ship's donations.

Highlight of the physical fitness competition was a push-up contest featuring more than 20 contenders selected by their divisions and various "sponsors" from the ship, its air squadrons and the Marine Detachment.

Disproving the adage that "youth will tell," the eventual winner of the push-up contest was the ship's operations officer (age 40-plus) who did 78.

As a result of the competition, *Bon Homme Richard* now claims to be undisputed holder of the Pacific Fleet carrier fitness championship.

CARNIVAL TIME — Men of USS *Bon Homme Richard* enjoy "drag race" and prepare food for the midway.

THE BULLETIN BOARD

Believe It or Not, Navy Duty in Bermuda Is Not Hard to Take

U.S. SERVICEMEN have been stationed in Bermuda since 1941 and have become a natural part of the community. U. S. Navy, Marine Corps, Air Force and Army are represented, either at the U. S. Naval Station or at Kindley Air Force base.

Bermuda is the collective name of a group of about 350 small islands, the seven largest of which are connected by bridges and causeways and constitute what is commonly considered the mainland. The islands are the most northerly group of coral islands in the world. They are situated 568 miles east of Cape Hatteras, N. C.; are only 666 nautical miles from the port of Halifax, Nova Scotia. The total land area is approximately 22 square miles.

Hamilton, the capital city, is centrally located on the shores of a harbor of that name. The town of St. George, which was the original capital, is located at the eastern end of the island group and is a place of great historical interest. Somerset is the third town and is located at the western end of the island group.

Bermuda's climate is one of the most equable in the world. The temperature range is from 41 to 80 degrees. There is no rainy season, the rainfall being distributed fairly evenly throughout the year. The humidity ranges from 79 to 95 per cent with considerable wind during the winter months. Although prevailing winds are seasonably southerly, with an average velocity of 12 mph, high winds prevail during certain seasons, sometimes reaching hurricane velocity.

Currency — Sterling is the legal tender and the Bermuda government issues its own bank notes. The present rate of exchange is approximately $2.82 per pound. Because of the importance of the tourist trade to the economy of Bermuda and the large percentage of that trade which comes from Canada and the United States, both Canadian and U. S. currencies are accepted in all places of business on the islands.

Transportation — There are approximately 100 miles of roadway, most of which is now paved. Transportation is by private motor cars, bicycles, motor-assisted bikes, taxis and boats. Regular motor bus service covers the islands. The maximum speed limits are 20 mph in the country and 15 mph in the towns and built-up areas. There is scheduled Navy motor launch service from the naval station to Shore Patrol headquarters landing in Hamilton.

Passenger cars are limited to 2000 cc or 14 horsepower at the rear axle. The over-all length of a car cannot exceed 166 inches, and its width may not be more than 66 inches. The Nash Metropolitan, for example, meets these requirements. Several English-made cars meet Berumudian requirements. A car bought outside the islands must be less than six months old to be licensed. All cars imported to Bermuda must pass a rigid inspection before license plates are issued. Autos may be owned and driven by military personnel and their dependents only if they are permanently stationed in Bermuda and have been licensed to drive by the colonial government.

The cost of registration depends upon the displacement. For an auto with 1100 cc displacement, the cost is about $65.00. All passenger cars must carry third party or public liability and property damage insurance. Few U. S. insurance companies insure in Bermuda.

All-Navy Cartoon Contest
Charley Wise, HMCA, USN

"Mighty fine stew. My compliments to the chef!"

Owing to Bermudian restrictions on sizes of autos, an exception has been made to DOD directives concerning transportation of foreign-made automobiles purchased overseas. New cars can be bought for approximately $1800. This includes registration and insurance. These small cars are economical to operate and have a good resale value when you are ready to leave the colony.

Many people ride small motorcycles or auto-bicycles which provide a cheap but dangerous (owing to the congestion on the roads) means of transportation. Crash helmets must be worn by service personnel when riding motorcycles, motor-assisted bikes, or scooters. Used auto-bikes may not be imported. Bicycles and motor-assisted bikes can be rented and driven without a license. Any cycle with two or more speeds must be driven by a licensed driver who is 21 or more years old.

Recreation (Off Base) — Swimming is popular and may be enjoyed almost anywhere around the islands. The beaches are perhaps one of the greatest attractions. They stretch for miles along the southern coast, broken by headlands and sections of rugged shore. Sea bathing is popular and can be enjoyed almost the year 'round, although the water in the winter months is considered cold by many. Skin diving is very popular.

There are numerous boating and yachting clubs on the island, and they vary in cost of memberships. Some require that you own your own boat, but others furnish boats for their members. Thursday afternoons and Sundays are racing days and you can see dozens of white sails around the various bays and coves almost every day.

Golfing facilities are excellent, but

greens fees are rather expensive unless you belong to a club. Membership fees are inexpensive by U. S. standards. Tennis is a popular sport, with excellent facilities everywhere.

The waters surrounding Bermuda abound in hundreds of varieties of game fish. Pompano, bonefish, chub, snapper, mackerel, tuna, wahoo and marlin, to name but a few, have made Bermuda a fishing vacation resort.

Recreation (On Base) — At present the naval station has under construction a small boat basin. The Special Services department has two sailboats. When completed, the small boat facility will have several boats available for a day of sailing or for competition against some of the local clubs.

The station has free movies nightly, outside in the summer and indoors in the winter. In addition, movies are shown in the various messes and clubs.

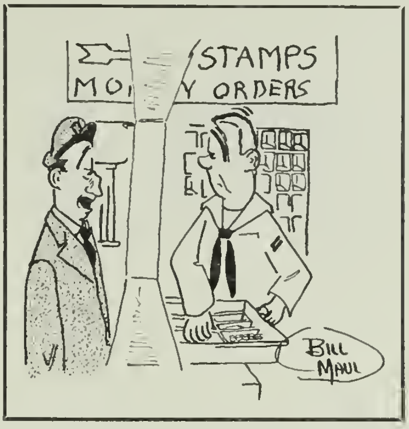
Bermuda is an ideal place for artists and photographers.

Special Services maintains a gear locker where men may check out equipment for recreation, as well as a hobby shop which is open seven days a week. Among the departments of the hobby shop is the resale section where models, leatherworking kits, woodcraft kits and model engines may be bought at substantial savings over stateside prices.

Religious Facilities — The naval station boasts a beautiful chapel which was formally dedicated in 1956. Seating 288 worshippers, the chapel is finished in cedar wood which came from trees on the station. The oak pews and electronic organ were gifts of the Navy Chaplain Corps. Two prayer chapels — one for Protestants and the other for Catholics — are located on either side of the chapel. Two chaplains (one Protestant and one Catholic) are permanently assigned.

Medical Facilities — Bermuda boasts an exceptionally healthy — although humid — climate, and its disease rate is very low. The islands are free of snakes and poisonous insects, with the exception of the centipede, which will give a painful, but never fatal, bite. Mosquito and fly population is light; flea and cockroach population heavy. Sunburn and poison ivy are problems.

All-Navy Cartoon Contest
W.R. Moul, CT1, USN



"Got that now? Seven threes, four sevens, three fours, five separate sevens, six twos and five sixes."

Essential hospitalization and sick call facilities are available to all service personnel and their dependents at the naval station dispensary. Inpatient care for dependents is limited to uncomplicated obstetrical cases. All other personnel requiring hospitalization are normally transferred to Kindley AFB hospital on the eastern end of the islands.

Although the incidence of communicable disease on the islands is very low, all personnel transferred to Bermuda should have completed their immunizations before departing continental U. S.

Routine dental treatment for service personnel and their families is available. There is a delay in obtaining appointments for dependents' work; therefore, it is advisable to have any urgent or extensive dental work done before leaving the States. Good civilian treatment is available in Hamilton. Orthodontic treatment is not available or authorized.

Commissary and Navy Exchange — All types of food products of United States origin are available at the commissary store on the naval station and in the base commissary at Kindley.

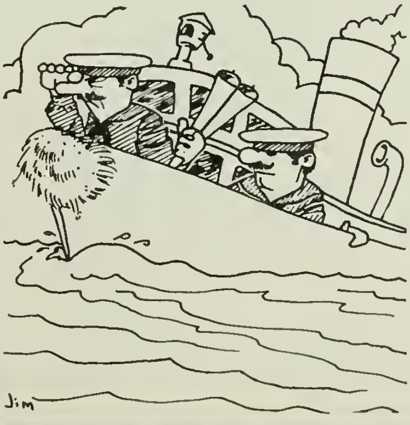
Fresh vegetables and fruits of a highly perishable nature are imported from the States. Fresh meats of all types, frozen foods, fresh eggs of U. S. origin and recombined milk are available.

The Navy Exchange stocks clothing, toilet articles, housewares, major appliances, radios, TVs and records. A special order department is

WAY BACK WHEN

Mosquito Squadron

Some 64 years ago, just before the Spanish-American War, U. S. defense planners were looking for a naval force to satisfy a need for ships to defend the Atlantic Coast without weakening the fighting Fleets. Their answer was the Auxiliary Naval Force (Mosquito Squadron) — some 40 ships, including yachts, tugs, and outdated Civil War monitors — which was manned by 2300 members of the naval militia from various states.



The Mosquito Squadron was useful in protecting mine fields and enforcing quarantine regulations — thereby enabling fighting units to concentrate on the theater of war instead of spreading out for coastal defense.

The Northern Patrol Squadron, a seagoing force, was another of four Atlantic forces of that era. Its mission was the protection of North Atlantic coasts and commerce, from Maine to the Delaware Capes.

The other two Atlantic forces were the North Atlantic Fleet and the Flying Squadron, between which most U. S. fighting ships were divided. The North Atlantic Fleet, based at Key West, Fla., operated in the Gulf of Mexico and the Caribbean. The Flying Squadron conducted its Atlantic operations out of Newport News, Va.

In the Pacific, there was the Asiatic Squadron — which consisted of the cruisers USS *Olympia*, *Baltimore*, *Raleigh* and *Boston*; the gunboats *Concord* and *Petrel*; and the revenue cutter *McCulloch* — and the Pacific Squadron, which took part in the occupation of Hawaii.

available for the ordering of flatware, hollow ware, sporting goods, furniture and major appliances not normally stocked. The Navy Exchange also operates an automobile service station, laundry and dry cleaning plant, barber shops and beauty shop, and a TV repair shop. There is an Air Force Exchange at Kindley.

Education — There are no schools located on the station for dependent children. They attend the local Bermuda schools from kindergarten through high school. The Navy pays for tuition, except kindergarten, attends to the registration and furnishes transportation by chartered bus for students living both on and off station.

There are 14 local schools, the most distant of which is about 45 minutes from the base. Both public and private schools are used by station personnel. In general, Bermuda schools compare favorably with those in the United States.

School children wear a distinctive uniform depending on which school they attend. The expense of these uniforms must be borne by the parents.

A nursery school for children under school age is maintained on the station. The cost for this is $10 per month per child, which is borne by the parents. A baby-sitting nursery, known as the "Moppet Club," is maintained by the Navy Exchange.

Housing — Government housing on station is limited to personnel in key positions, and normally there is a long waiting list for on-station quarters. Housing may be located off station, but is usually below U. S. standards. Rents vary, but the average two-bedroom furnished house will normally rent for about $112 per month. The furnishings are limited to the bare essentials, are sub-standard, old and worn. Most unfurnished houses do not include a kitchen stove or a refrigerator, and average about $10 less a month than furnished houses.

A housing allowance is paid to members with dependents living off station. This allowance is payable to all officers regardless of pay grade and to enlisted personnel in pay grades E-4 through E-9. Current rates are contained in *Joint Travel Regulations*.

All-Navy Cartoon Contest
ENS R. S. Harvey, SC, USN

"They say he's a stickler on Uniform Regs."

Dependents' entry approval can only be granted to those who are eligible for transportation of dependents at government expense and who have suitable quarters available to them; in this connection, all off-station housing must be inspected and approved by the off-station Housing Board for adequacy, condition and rental price.

A sponsor system, whereby an individual already in the area accepts the responsibility for providing either temporary or permanent accommodations for yourself and your family, has been established. If you want to be sponsored, write a letter to the housing officer of the activity to which you are ordered, indicating ages and sex of children, whether you wish an unfurnished or furnished dwelling and similar information. Do not ask the command to which you are attached to request entry clearance until you have received an answer to your personal letter. The housing officer, in his letter, will advise you concerning rental costs, the expected waiting period for civilian housing, waiting period for receipt of household effects, personal transportation needs, and command policy relative to use of temporary lodging allowance. Application for a sponsor does not ensure that you will be granted immediate application for entry of dependents, but will greatly help your chances of concurrent travel.

"Congratulations on making Seaman, Little Bear."

Temporary housing, though limited, is available on station. Also, families may live in off-station hotels or guest houses while awaiting permanent housing, and receive a temporary living allowance to help defray the expense (check *Joint Travel Regulations*). Such housing can be arranged through your sponsor.

Travel — The majority of personnel ordered to Bermuda will be issued travel orders via MATS from Charleston, S. C. However, those whose previous duty station was in the Washington, D. C., area will normally travel commercial air from Washington; those from Philadelphia north by commercial air from New York.

Do not pay dependents' travel overseas with the intention of obtaining reimbursement, because you just won't get it. The Chief of Naval Personnel issues transportation requests for all approved commercial transportation and will not reimburse you for tickets purchased for any travel beyond the United States.

Clothing — Military personnel should have the minimum requirements in uniforms. Civilian clothing may be worn on the station after working hours in an off-duty status.

Casual clothing is worn the year around with colors and material comparable to those worn in South Carolina. Both summer and winter clothing will be required. Rain wear for each member of the family is necessary. Plastic type raincoats with hoods are recommended.

For the warmer months (mid-April to mid-November), women wear summer sports clothes, swimsuits, cotton dresses, short or long evening dress, lightweight coat, sweater or stole for evening. Slacks, short shorts and markedly abbreviated clothes are considered bad taste for street wear.

Men wear lightweight suits, sports clothes, Bermuda-length shorts.

During the cooler months, women will wear lightweight dresses and suits, sweaters and skirts, sportswear, afternoon dress, short or long evening dress, lightweight wool or weatherproof coats. Many social functions given in Bermuda require formal attire.

Children's clothing requirements include cotton playsuits for summer and winter clothing of a weight similar to that worn in Charleston, S. C. or San Diego, Calif.

The Navy Exchange carries a variety of ready-to-wear women's, men's and children's clothing. It also sells basic shoe styles for all members of the family. Many individuals use the services of mail order houses or have friends or relatives send them clothing from time to time. Some families encounter difficulty with respect to shoes; therefore, it is recommended that your family be outfitted with shoes before arrival.

General Information — Rainwater is the source of water supply and must be used sparingly. This is true whether you live on station or off.

The station operates a laundry and dry cleaning establishment. In addition, there are good dry cleaning firms in Hamilton which have pickup and delivery service on the station.

Individual washing machines are desirable, especially for those having children.

All U. S. electrical appliances can be used in Bermuda, but parts and labor are very expensive.

The local TV station comes on the air at 1700 and broadcasts until 2400. Programs consist of rerun U. S. shows plus local shows, such as weather, news and features. Outside antennas are desirable and are available locally. American - made TVs operate without modification.

Domestic help is available and inexpensive. Wages will vary according to the quality. More highly specialized servants are available at higher wage rates.

Cost of Living Allowance — A cost of living allowance is paid to married personnel who are authorized to bring their dependents to Bermuda. Rates payable are based on pay grade and number of dependents living in the area. As with housing allowances, rates for the cost of living allowance are listed in the *Joint Travel Regulations.*

Upon receipt of authority to bring dependents to Bermuda, the Navy will ship your household effects if you are eligible for such shipment. Commercial cargo ships from Charleston, S. C., Norfolk, Va., and Bayonne, N. J., transport household effects to Bermuda. Allow about two months for the arrival of your goods. It is suggested that you ship necessary small items via express, at least up to full express allowance. Arrangements for this shipment must be made through your local supply officer. Such necessary items would include kitchen utensils, linen and china to be used until your main shipment arrives.

NSC Oakland Going on 21

The big Naval Supply Center at Oakland, Calif., observed its 21st anniversary last year, celebrating its growth from the Pacific Fleet's corner store to a supermarket with one-stop shopping facilities.

Oakland was designated an ideal location for a naval supply base in 1910 by the Navy Department General Board. However, it wasn't until 1940 that dredges dispossessed the duck hunters who frequented the blinds in the muddy expanses of Oakland's middle harbor area.

By August 1940, the first piles were driven in the area and, in December 1941, Oakland Naval Supply Depot was commissioned and in business. By August 1947, it had grown enough to be called a center rather than a depot.

The center reached its peak in March 1945, when the installation — which began with 656 employees in 1951 — employed 14,000 people working around the clock, seven days a week, to supply as many as 26 ships in one month.

Recurring world crises have kept the center at a high level of activity. Today, the center is manned by about 5000 people, both military and civilian. It has its own police and fire departments and its own distribution system for water, heat and power.

It has 19 miles of paved streets and 165 buildings and wharves, which will accommodate 13 ocean-going vessels at one time. It also has its own automotive and industrial handling equipment, dispensary facilities, ambulances, telephone and telegraph network, railroad and waterfront loading equipment, electronic data processing machines and parking space for about 2000 automobiles.

Each year, the center fills two-and-a-half-million orders from its billion-dollar inventory, which ranges from small nuts and bolts to multi-ton ship propellers, from shoelaces to lifeboats and from library books to nuclear submarine gear.

Since the Oakland center supplies 90 per cent of all logistic support to ships and bases in the Pacific area, it is a rare duck that hasn't been there at least once.

YOU DON'T NEED GLASSES to see that nine others are waiting to read ALL HANDS Magazine, so pass it on.

Do You Have a Special Skill? Is It Recorded with Your NEC?

"I've been trained as a specialist within my rating but haven't been working as one . . ."

"I don't like the idea of an enlisted classification code being assigned, then taken away almost every time I change duty stations . . ."

"I think NECs should weigh heavier in determining my assignment to duty . . ."

These are just a few observations concerning the Navy Enlisted Classification (NEC) system, which, in one form or another since World War II, has provided enlisted men with code numbers to identify their special skills, in addition to those generally linked with their rates.

However, it has sometimes been difficult to insure that personnel are correctly coded as they acquire special skills, then to make this information available to detailers at distribution offices, who use the code in filling specialist billet requirements. Individual commands sometimes shuffle codes around to suit the particular job a man may be doing at the time, not necessarily the job he has been trained to perform as a specialist, and sometimes codes are just plain "lost."

Many of the old weaknesses of the NEC system, however – those above were quoted as examples – may soon be corrected. The Navy is doing something about the NEC control system, which should mean:

- If you have been trained as a specialist within your rating, your chances for working as a specialist are better than ever.
- Your NEC will carry more weight when it's time for a transfer.
- Your NEC will no longer be assigned (or taken away) by your command without approval of the Chief of Naval Personnel.

With the development of the Navy's Manpower Information System – based upon electronic data processing – a centrally controlled NEC procedure now insures accurate code assignments.

The assignment of all NEC codes for active duty personnel, with the exception of entry trainee codes (used as a temporary means of identifying strikers), is controlled by the Chief of Naval Personnel. Basically, here's how the system works:

Each enlisted man or woman has two codes on a magnetic tape record. If no "specialty" code has been assigned, the record shows 0000 and 0000. This is in addition to basic rate information.

Changes to the NECs are made only when a training command reports a course graduate (earning him a "specialty" code); when other commands report codes earned through on-the-job performance; or when a command shows reason why a person's specialty code should be canceled. Such changes are then sent to the Personnel Accounting Machine Installations, which provide current information for distribution offices.

How does an individual find out what his NECs are under the new system?

In February 1962 his command first received a 1080-14 report from the PAMI which will show his primary and secondary NECs as they are recorded. From that time on, any authorized changes will be received by his command on an NEC Control Card issued by the Chief of Naval Personnel.

What does an individual have to do to have his codes corrected if he thinks there is an error? He should wait until the February 1080-14 report is received. If there still appears to be an error, he should ask his command to write a letter to the Chief of Naval Personnel giving all the facts.

While this may seem like a big order, there is one major advantage – it won't have to be done over

WHAT'S IN A NAME

Stores, Small Stores, Naval Stores

Every Navyman has heard the terms "stores," "small stores" and "naval stores," and you have probably used them yourself without being quite sure of their exact meaning. Here's the difference:

"Stores" is Navy talk for supplies, and denotes any article or commodity used by a naval ship or station, such as equipment, consumable supplies, clothing, petroleum, oils, lubricants, medical supplies, ammunition, etc.

Don't confuse "stores" with the more specific term "naval stores," which means something else. Today naval stores has a commercial meaning and it applies to the manufactured products of the turpentine-rosin industry, chiefly the gums and by-products extracted from pine trees. The term was originally selected to identify the chief user of pine-tree products.

In the days of wooden ships naval stores included all raw materials used in building and maintaining sailing vessels, such as tar, pitch, rosin, flax, cordage, masts and timber. All had wide shipboard application.

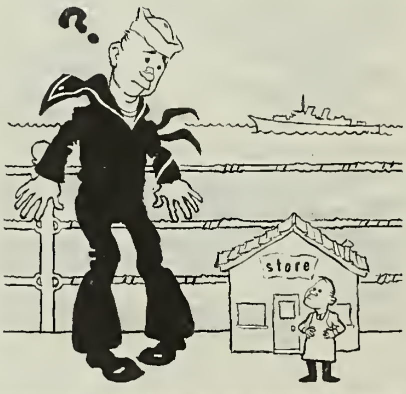
A mixture of tar and pitch, or tar and rosin, for example, was used as a protective coating for ship bottoms. Pitch was used to fill deck seams. Wood tar was (and still is) a good preservative for hemp lines.

Although flax, cordage and lumber are no longer classed as naval stores, the term still embraces turpentine, rosin, pine oil, pine tar, pitch and rosin oil.

In one form or another, some naval stores are still used aboard ship. However, pine-tree products these days are more widely used in manufacturing and other fields. Turpentine is perhaps the most commonly known naval stores item today.

Many naval stores have medicinal value. For example, druggists use tar, turpentine and linseed oil as ingredients for certain ointments and in other pharmaceutical preparations.

"Small stores," according to *Naval Orientation* (NavPers 16138-D), are personal needs for seagoing men, such as articles of clothing, and related articles, such as buttons, brushes, etc.



again. Once corrected, the information will be kept correct.

The Navy expects this centralized system to assist manpower planners and improve personnel utilization. And, as the new procedure is adopted Navy-wide, administrative workloads for individual commands should decrease.

BuPers Inst. 1220.26 outlines the new assignment control system. The *Manual of Navy Enlisted Classifications* (NavPers 15105B) explains the various NEC codes.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

AlNavs

No. 1 — Announced the acceptance of the office of Secretary of the Navy by Fred Korth.

No. 2 — Ordered the delay of submission of certain reports to the Bureau of Medicine and Surgery.

Instructions

No. 1120.18H — Outlines the eligibility requirements and processing procedures whereby USN personnel may seek appointment to commissioned status in either the Integration or Limited Duty Officer programs.

No. 1133.14 — Provides instructions for voluntary reenlistments and extensions of enlistments of personnel whose enlistments have been involuntarily extended.

No. 1133.15 — Authorizes on a Navy-wide basis extensions of enlistment for less than a year under certain specified conditions.

No. 1210.11 — Invites applications from permanently commissioned USN officers for transfer between the unrestricted line and the Supply Corps or the Civil Engineer Corps.

No. 1520.6J — Describes revised standards of eligibility for officer submarine training and prescribes the method of application.

No. 1520.85 — Establishes eligibility requirements and invites applications for naval aviation observer training from commissioned officers and officer candidates, leading to their designation as Naval Aviation Observers (NAO).

No. 1710.2A — Implements Department of Defense policy on international sports competitions by establishing rules and regulations for participation of naval personnel in such competitions.

No. 1926.2B — Announces rules for the retention and involuntary release of Naval Reserve officers.

No. 4600.1C — Announces a revision of the established system of estimating travel costs resulting from the changes of home ports and home yards of ships and permanent duty station changes of aviation and certain miscellaneous units.

Notices

No. 1120 (29 December) — Announced the selection of personnel for training leading to appointment in the grade of ensign (USN) in the unrestricted line or staff corps, and for temporary appointment in the grade of ensign or lieutenant (junior grade) for limited duty only.

No. 1440 (29 December) — Announced a change in the Navy enlisted rating structure.

No. 1520 (12 January) — Invited applications from Supply Corps officers for assignment to the Subsistence Technology Course (six months) and the Transportation Management Course (five and one-half months).

No. 1133 (15 January) — Invited attention to, and emphasized the necessity for strict compliance with the distribution of the Enlisted Service Record, Page 14 (Record of Discharge, Release from Active Duty, or Death).

No. 1611 (17 January) — Revised the dates of submission of the periodic reports on the fitness of officers and held in abeyance those provisions of Art. B-2203, *BuPers Manual,* which are in conflict with this notice.

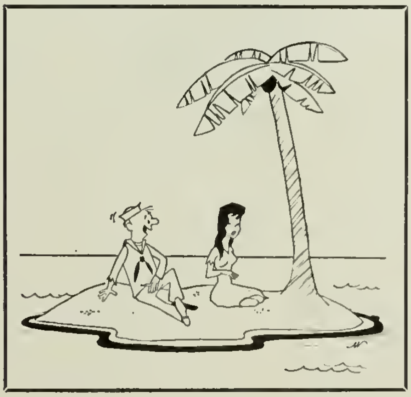
No. 1130 (18 January) — Provided instructions for enlistment in the Regular Navy of Naval Reservists recalled under the provisions of Public Law 87-117.

No. 1520 (18 January) — Announced the selection of officers for postgraduate instructions.

No. 1430 (25 January) — Provided information regarding advancements resulting from Navy-wide examinations.

No. 1650 (25 January) — Described the use of two new forms for requesting medals and awards, NavPers 2887 and NavPers 2888.

All-Navy Cartoon Contest
J.M. Stevens, SA, USN



"Doin' anything tonight?"

Film Tells Story of Leadership at the Top

A new Navy film on leadership is now available for showing on ships and stations.

Entitled *Leadership at the Top,* it is a 13-minute, 16mm motion picture prepared in June of last year. It presents Under Secretary of the Navy Paul B. Fay, Jr., with his report on the status of the Naval Leadership Program during fiscal 1961. Also included are personal statements concerning Navy, Marine Corps and civilian leadership by former Chief of Naval Operations ADM Arleigh A. Burke, GEN David M. Shoup and ADM James S. Russell, and scenes of the leadership working group and leadership field teams in action.

This film is currently being distributed to all Navy and Marine Corps film libraries, and to the Fleet Entertainment Motion Picture Exchanges. It may be requested by title and catalog number MN-9635.

Just What You've Been Waiting for—A Roundup on Taxes

If you haven't yet submitted your income tax return for 1961, you'd better pull yourself together and get at it. By the time you read this, the April 15 deadline will be rounding the last corner.

Maybe you're one of the early birds who has already sent in his return. However, if you haven't, the information below will be of some help to you. If this summary doesn't cover any of the problems that have been delaying you, a copy of *Federal Income Tax Information for Service Personnel* 1962 Edition, issued by the Office of the Judge Advocate General, should clear the air. You'll find a copy in your disbursing office or legal assistance office. You'll find personal help there, too.

A few changes have been made since the earlier roundup of federal income tax information appeared in the March 1960 issue of ALL HANDS.

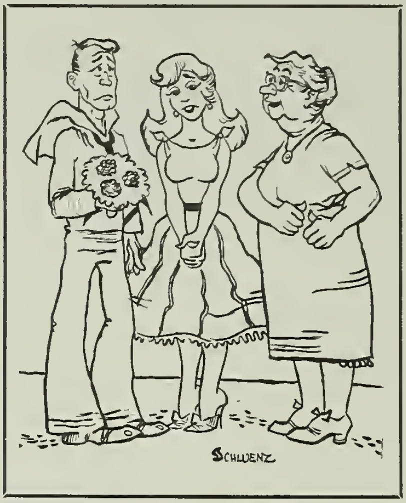
Here is a brief summary of these changes:

Medical Expenses — If you pay the medical bills for your dependent parents who are 65 years of age or older, you can deduct the entire expense, not just the amount which exceeds three per cent of your adjusted gross income.

Also, if you send your children to private schools and medical care is included in the tuition, get an itemized statement from the school showing the amount allocated to medical care and claim it on page two of Form 1040.

Declaration of Estimated Tax— There have been some changes for wage earners who are required to submit a declaration of estimated taxes.

This probably won't apply to most Navymen but for those to whom it does apply, the most important provision is that no declaration is required if the estimated income tax (less withholding tax) can reasonably be expected to be less than $40.00.



"Just returned from a six-month cruise all around the world? How interesting! You must sit down and tell us all about it!"

Charitable Deductions — If you are maintaining a full-time student, under a written agreement with a charitable organization, in grades one to 12 inclusive, who is not a dependent or a relative of yours, you may deduct the expense to you as a charitable contribution.

The student must be a member of your household and you can't deduct more than $50.00 times the number of full calendar months during the tax year in which the student is a member of your household.

If you are reimbursed or compensated for maintenance of the student, the expenses for his education are not deductible.

Another wrinkle is charitable deductions. If you are thinking of deducting the expenses of attending a church conclave, don't, unless you were a duly chosen delegate of the church.

Mileage Payments — Payments made to a parent or other taxpayer for transporting children to school shouldn't be listed as gross income, if the taxpayer isn't in the business of transporting kids to school and bus service isn't available.

U. S. Savings Bond Interest — The tax-deferred interest on Series E, F or J savings bonds exchanged tax-free for current-income Series H bonds is taxable when the Series H bonds finally mature or are redeemed.

New Form and Schedule — Form 1040W has been discontinued. Form 1040 is a new two-page return which will be used by people who cannot use form 1040A. There is a new Schedule B for reporting income other than wages and for dividends received and retirement income credits.

Identification Numbers — Your Social Security number must show on any tax return, statement or document you submit. If you receive dividends or other income disbursed to you through banks or other disbursers, supply them with your Social Security number if they request it. There's a $5 penalty if you refuse to.

Survivor Annuities — The plan provided by the United States Code for annuities based on retired or retainer pay has been amended and is now called the "Retired Serviceman's Family Protection Plan." The amendments did not change the taxable status of retired pay or survivor annuities, however.

Navy income that need not be reported

The following items received from the Navy are excluded from "gross income" and therefore need not be reported:

- Basic allowance for quarters, including cash difference for inadequate quarters, heat and light furnished in kind.
- Basic allowance for subsistence.
- Cost to government for transportation of dependents and household goods.
- Rations furnished in kind to enlisted men.
- Uniform gratuity or clothing allowance for officers and enlisted personnel.
- Retired pay of persons retired before 1 Oct 1949 for physical disability resulting from active service and who are receiving pay under laws in effect before 1 Oct 1949.
- Disability severance pay and disability retired pay computed on percentage of disability, received for separation or retirement after 30 Sep 1949 under the Career Compensation Act of 1949.
- Uniforms furnished in kind to enlisted men.
- Death gratuities.
- Personal money allowances received by fleet admirals, admirals and vice admirals.
- Money received by naval attaches for entertaining and exceptional purposes, if expended solely

in connection with official duties.

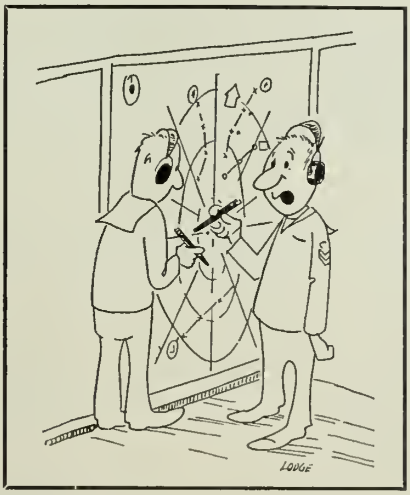
- Mustering-out pay.
- State bonus payments for services rendered to the United States.
- Amounts paid to, or on behalf of, veterans under the WW II and Korean GI Bills.

Deductible Items

Adjusted Gross Income — Deducting any applicable items in the following list from your gross income will give you your "adjusted gross income." The following are deductible items.

- Mess bills afloat — An officer with or without dependents who is assigned permanent duty afloat, may deduct mess bills for any period during which his ship is away from its home port for longer than an ordinary work day. The same principle applies to air personnel away from a squadron's home base.
- Travel expense — The excess expenses may be deducted if you are traveling in a mileage or per diem status. Form 2106 may be used for this purpose.
- Transportation expenses may be deducted by Reserve personnel if incurred while performing authorized drills under competent orders, even if they do not receive reimbursement for such travel.
- Expenses attributable to rent and royalties are deductible.
- Losses from sale or exchange of business property are deductible items in computing taxable income.
- Deductions from adjusted gross income — Once you have found your adjusted gross income you may make deductions for the following items to which you are entitled. You do this only if you are filing the long form (Form 1040) in which you itemize your deductions. If you are not itemizing on page 2 of Form 1040 or use 1040A you will receive a standard and automatic deduction of about 10 per cent of up to $10,000 of adjusted gross income in lieu of itemized deductions.
- Contributions paid during the taxable year for exclusive public use (churches, United Givers Fund, Red Cross, Navy Relief, USO, etc.).
- Interest on personal indebtedness, such as mortgage on real estate or, under certain circumstances and to a limited extent, carrying charges on installment purchases of personal property.
- As a general rule, state and local taxes are deductible by the person upon whom they are imposed by law. However, federal excise taxes (luxury taxes), federal income and certain foreign taxes are not deductible.
- During periods of illness or hospitalization you may (under certain circumstances) be entitled to deduct your pay (up to a total of $100 weekly). To support a claim for this exclusion, however, you might be requested by IRS to furnish a statement from the attending physician, the hospital, the employer, or other acceptable evidence of absence, illness, and rate of payment. You may not deduct the first seven calendar days of such a period unless the absence is a result of injury or you are hospitalized at least one day. Form 2440 spells out the way to compute the "sick pay" exclusion.
- Child care, a deduction limited to $600, is allowed working women or widowers, as well as men who are legally separated or divorced, for the expense of caring for certain of their dependents in order that the taxpayer may be gainfully employed. A married woman may claim the deduction only if she files a joint return with her husband. Then the $600 is reduced by the amount of their joint income over $4500.
- Losses. For example, a loss occasioned by damage to your own automobile is deductible to the extent that it is not covered by insurance, unless it is the result of willful negligence on your part.
- Miscellaneous deductible items include uniform *equipment* (insignia of rank, corps, etc., but not the uniform itself); amount of reenlistment bonus refunded by reason of termination of enlistment; alimony payments, if included in the wife's gross income; dues to professional societies, etc.

All-Navy Cartoon Contest
LT Billups E. Lodge, USN



"A million-dollar radar, a million-dollar missile and a 25-cent grease pencil connecting them."

Items which are not deductible from your adjusted gross income include: Personal living or family expenses other than the exceptions noted above; cost of moving and shipping household goods; cost of transportation of dependents; premiums paid on life insurance policies; expenses of visiting home while on furlough, leave or liberty; and amounts paid for U.S. Savings Bonds.

Your Exemptions

Exemptions for you and your dependents are treated as deductions from adjusted gross income in arriving at "taxable income." The amount of exemption allowed for each dependent is $600 and exemptions are allowed for the following:

- You, the taxpayer.
- Your spouse.
- Each "dependent." You can claim credit only for persons who meet all of the dependency requirements listed on the instructions accompanying Forms 1040 and 1040A.

An individual receiving support from two or more persons, none of whom furnished more than half, may be claimed as a dependent under certain circumstances. The conditions are listed in the tax instructions.

Citizens of foreign countries will not qualify as dependents unless they are residents of either the U.S., Canada, Mexico, Canal Zone or the Republic of Panama.

A child born or legally adopted in the Philippine Islands before 1 Jan 1956 may be claimed as your dependent if you were a member of the U.S. armed forces at the time the child was born or adopted, and providing the child is a resident of the Philippine Islands during the taxable year.

A last word of warning! If you

have not already filed your return for 1961, get busy. There are penalties (some severe) for not filing, and if you do not send in your return you will not collect any refund which may be due you.

If you've read the preceding pages, you are now more familiar with the regulations pertaining to federal income taxes, particularly as they apply to the Navyman on active duty. It should be of help in understanding your rights and liabilities under federal income tax laws.

At the same time, certain states, territories and possessions of the United States also have their own income tax laws under which you may have liabilities in addition to the federal income tax. Below, you will find a summary of the requirements of the local income tax laws, as prepared by the Office of the Judge Advocate General. It replaces the summary presented in the March 1960 issue of ALL HANDS.

You should note that unless your state makes a special exception, members of the armed forces are not excused from state and local income taxes merely because they are on active duty.

Generally speaking, your liability for state and local income and personal property taxes (but not real property taxes such as on your home) is determined on the basis of the laws of your domicile or legal residence, sometimes referred to as your home state or the state of which you are a citizen or inhabitant.

Most state taxes are based on actual residence or presence in the jurisdiction and for this reason the Soldiers' and Sailors' Civil Relief Act is important to you. Although it protects you from taxation by a state of which you are not a resident, it does not relieve you from liability for taxes to your home state. There is no exemption by reason of being in the naval or military services unless your home state law provides special benefits for you.

Active service personnel are protected to the extent provided by the Soldiers' and Sailors' Civil Relief Act. This Act provides that, for the purpose of taxation of your individual income and personal property, including your automobile, if you are absent from your place of legal residence or domicile solely by reason of compliance with military or naval orders, you will not be considered to have become a resident of any other state or possession of the United States while so absent.

In this situation your active service pay and personal property are exempt from taxation in the state in which you are serving. So is your automobile, if the license, fee or excise imposed by your home state is paid.

There is no tax exemption under the act for retired and retainer pay; your wife's income, property, or automobile; or income from a business, rental property or other source, such as part-time employment, in the state in which you are living by reason of active duty orders.

In many cases, tax authorities have taken the position that a serviceman has abandoned his original domicile when there is a showing that the right to vote in his home state has not been exercised and that a home state's income taxes, if any, have not been paid.

Because of this, it is much easier to substantiate your domicile in your home state if the required taxes have been paid, your voting privilege has been exercised and other ties to the home state, such as automobile license plates and operator's permit have been kept current.

Below you will find a summary of the salient features of the income tax laws for the calendar year 1961 of the states and possessions of the United States. It primarily indicates the requirements for the filing of income tax returns by servicemen who are residents of jurisdictions having income tax laws; personal exemptions and tax credit allowed; and dates for filing and paying taxes.

SUMMARY OF INCOME-TAX LAWS OF STATES AND POSSESSIONS OF THE UNITED STATES

NOTE:
1. **"Married couple" or "married" as used in this summary means husband and wife living together.**
2. **A married serviceman or woman is considered to be living with his or her spouse when separated only by reason of military orders.**
3. **"*" indicates provisions for declaration and payment of estimated taxes.**
4. **The following states do not impose individual income taxes on residents generally: Connecticut, Florida, Illinois, Maine, Michigan, Nebraska, Nevada, New Jersey, Ohio, Pennsylvania, Rhode Island, South Dakota, Texas, Washington, and Wyoming. New Jersey imposes a "commuter tax."**
5. **Under section 513 of the Soldiers' and Sailors' Civil Relief Act (50 USC App. 573) a member may defer payment of taxes without interest or penalty, until 6 months after discharge if ability to pay is materially impaired by reason of active service. Returns must be filed on time, however.**

Lowest Amount Of Income Which Requires Residents To File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
***ALABAMA**				
Net income of: $1500 if single, $3000 if married or head of family.	$1500 if single, $3000 if married or head of family, $300 for each dependent.	Return and payment due 15 April.	State Department of Revenue, Income Tax Division, Montgomery 2, Ala.	Members outside continental United States may defer filing until 30 days after they return to the U. S.
***ALASKA:**				
Gross income of $600 from sources within the state.	Same as federal.	Return and payment due 15 April.	Department of Revenue, Alaska Office Building, Juneau, Alaska.	All active-service pay exempt after 1950.

Lowest Amount Of Income Which Requires Residents To File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
ARIZONA				
Net income of: $1000 if single, $2000 if married. Gross income of $5000.	$1000 if single, $2000 if married or head of household, $600 for each dependent, $500 additional for taxpayer and spouse if blind.	Return due 15 April. Payment with return or in three equal installments.	Arizona State Tax Commission, Income Tax Division, State House, Phoenix, Arizona.	$1000 active-service pay is exempt. Members outside continental United States may defer filing and paying, without interest or penalty, until 180 days after release or termination of present emergency, whichever is earlier
ARKANSAS:				
Gross income of: $1750 if single or separated from spouse, $3500 if married or head of family.	Tax credit of: $17.50 if single, $35 if married or head of family, $6 for each dependent.	Return due 15 May. Payment with return or in two equal installments.	State of Arkansas, Department of Revenue, Little Rock, Arkansas.	All active-service pay is excluded.
****CALIFORNIA:**				
Net income of $1500 if single or head of household, $3000 if married.	$1500 if single, $3000 if married or head of household, $600 for each dependent, $600 additional for taxpayer and spouse if blind.	Return due 15 April. Payment with return or if over $50, in three installments with first payment not less than $50.	State of California, Franchise Tax Board, 1025 P Street, Sacramento 14, Calif.	$1000 active-service pay and all mustering-out and terminal leave payments received after 1 July 1952 are exempt. Filing and paying deferred without penalty or interest until 180 days after return to the U.S. from duty outside continental U.S.
***Note:* Domicile of service wife, if not a Californian, does not follow that of husband until both return to state.				
***COLORADO:**				
Gross income of $750.	$750 for taxpayer; $750 for spouse; $750 for each dependent; $750 additional for taxpayer and spouse if blind, 65 or older.	Return and payment due 15 April.	State of Colorado, Department of Revenue, State Capitol Annex, Denver 2, Colorado.	$2000 of active or reserve duty pay excluded during war or national emergency; $1000 during other times. ($2000 applies in 1961) Returns and payment of tax deferred without penalty or interest until one year after separation.
DELAWARE:*				
Gross income of: $600 if single or separated from spouse, $1200 combined gross income of married couple.	$600 for taxpayer; $600 for spouse; $600 for each dependent; $600 additional for taxpayer and spouse if blind, 65 or older.	Return and payment due 30 April.	State of Delaware, State Tax Department, 843 King Street, Wilmington 99, Del.	Deferment for filing and paying may be granted upon application, until 6 months after discharge.
***Note:* §1101(7) of the Delaware Income Tax Law provides in part:" 'Resident' includes any person domiciled in the state, except a person who, though domiciled in the state, maintains no permanent place of abode within the state, but does maintain a permanent place of abode without the state, and who spends in the aggregate not to exceed 30 days of the taxable year within the state; . . ."				
***DISTRICT OF COLUMBIA:**				
Gross income in excess of: $1000 if single or separated from spouse, $2000 combined income of married couple.	$1000 if single or separated from spouse; $2000 if married; $1500 if head of family; $500 for each dependent; $500 additional for taxpayer and spouse if blind, 65 or older.	Return and payment due 15 April.	District of Columbia, Finance Office, Revenue Division, Municipal Center, 300 Indiana Ave., N.W., Washington 1, D. C.	Deferment for filing or paying granted members outside the United States; until 6 months after return to the U. S.

SUMMARY OF INCOME-TAX LAWS OF STATES AND POSSESSIONS OF THE UNITED STATES — Continued

Lowest Amount Of Income Which Requires Residents To File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
*GEORGIA:				
Gross income of $1500 if single or separated from spouse. $3000 combined gross income of married couple.	$1500 if single; $3000 if married or head of family; $600 for each dependent (except one for head of family); $600 additional for taxpayer and spouse if blind, 65 or older.	Return and payment due 15 April.	Department of Revenue, Income Tax Unit, State Office Building, Atlanta 3, Georgia.	Deferment for filing or paying without penalty or interest granted members outside continental U. S. until 6 months after return to the U. S.
*GUAM:				
Same as federal.	Same as federal.	Same as federal.	Division of Revenue and Taxation, Department of Finance, Government of Guam, Agana, Guam.	Same as federal, however, as to service compensation, the government of Guam in practice has not imposed the Guam income tax on individuals subject to US income tax.
*HAWAII:				
Gross income of $600 ($1200 if 65 or older) from sources within the state.	$600 if single, $600 for spouse, $600 for each dependent, $600 additional for taxpayer or spouse if 65, $5000 in lieu of normal taxpayer exemption if blind.	Net income tax: Return and payment due 20 April.	Hawaii Director of Taxation, 425 S. Queen St., Honolulu 9, Hawaii.	All service pay excluded.
IDAHO:				
Gross income of $600 ($1200 if 65 or older).	Same as federal.	Return and payment due 15 April.	State of Idaho Office of Tax Collector, Income Tax Division, State Capitol Building, Boise, Idaho.	Same as federal, except if outside the continental United States may defer filing and paying until 6 months after discharge.
INDIANA:				
Gross income in excess of $1000. Joint returns not permitted.	$1000 for each taxpayer.	Return and payment due 31 January; or quarterly if over $25 any quarter.	Indiana Department of State Revenue, Gross Income Tax Division, State Office Building, 100 N. Senate Avenue, Indianapolis 4, Indiana.	All active and inactive service pay is exempt. Returns and payment of tax deferred until 6 months after discharge or end of hostilities, whichever is earlier.
IOWA:				
Net income of $1500 if single or separated from spouse, $2350 if married. Gross income of $2000.	Tax credit of: $15 if single, $30 if married or head of family, $7.50 for each dependent.	Return due 30 April. Payment with return or in two equal installments if over $50.	State Tax Commission, Income Tax Division, State Office Building, Des Moines 19, Iowa.	No service pay exemption. Extension for filing may be granted up to 6 months if application is made therefor.
KANSAS:				
Net income of: $600 if single or separated from spouse, $1200 if married. (Plus age and blind exemptions.) Gross income of $4000.	$600 for taxpayer; $600 for spouse; $600 for each dependent; $600 additional for taxpayer and spouse if blind, 65 or older.	Return due 15 April. Payment with return or in two equal installments if tax is more than $200.	State of Kansas Director of Revenue, Income Tax Division, State Office Building, Topeka, Kansas.	$1500 active-service pay excluded from gross income until the termination of the present world crisis as determined by the Executive Council of the State.
*KENTUCKY:				
Net income of: $1000 if single or separated; $2000 if married, head of household, blind, or age 65. Gross income of $1200 and $2500 respectively.	Tax credit of: $20 for taxpayer, $20 for spouse, $20 for each dependent, $20 additional for taxpayer and spouse if 65 or blind.	Return and payment due 15 April.	Commonwealth of Kentucky, Department of Revenue, Frankfort, Kentucky.	None.

Lowest Amount Of Income Which Requires Residents To File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
***LOUISIANA:** Net income of: $2500 if single or separated from spouse, $5000 if married. Gross income of $6000 or more.	$2500 if single, $5000 if married or head of family, $400 for each dependent (except one for head of family).	Return and payment due 15 May.	State of Louisiana, Collector of Revenue, Baton Rouge 1, La.	None.
***MARYLAND:** Gross income in excess of: $800 if single, $1600 if married.	$800 if single; $1600 if married; $800 for each dependent; $800 additional for taxpayer and spouse if blind, 65 or older, also for dependents 65 or older.	Return and payment due 15 April.	State of Maryland, Comptroller of the Treasury, Income Tax Division, Annapolis, Maryland.	$1500 of active-service pay excluded during time of war and prior to cessation of hostilities or while in a combat zone. (No exclusion in 1961) Members outside continental United States may defer filing until 3 months after return to the U. S.
***MASSACHUSETTS:** Earned income of $2000. Other taxable income in any amount.	$2000 for taxpayer against earned income, $500 for spouse having income of $2000 or less, $400 for each dependent, $2000 additional for taxpayer and spouse if blind.	Return and payment due 15 April.	The Commonwealth of Massachusetts, Department of Corporations and Taxation, Income Tax Bureau, 14 Court Square, Boston 8, Mass.	If requested and if for due cause, an extension of time for filing may be granted up to 6 months.
***MINNESOTA:** Gross income in excess of $750 if single or head of household, $1500 if married, $1500 combined income of husband and wife.	Tax credit of: $10 if single, $30 if married or head of household, $15 for each dependent. Additional taxpayer credit if blind or age 65: $10 each if single or head of household, $15 each spouse if married.	Return due 15 April. Payment with return or in two equal installments.	State of Minnesota, Department of Taxation, Income Tax Division, Centennial Office Bldg., St. Paul 1, Minnesota.	$3000 active service or Reserve duty pay excluded. Members of armed forces are granted extension of time to file and pay until six months after termination of military service.
MISSISSIPPI: Net income in excess of personal exemptions. Gross income in excess of $6000.	$5000 if single, $7000 if married or head of family.	Return due 15 April. Payment with return or in four equal installments.	State Tax Commission, Income Tax Division, Box 960, Jackson, Mississippi.	None.
***MISSOURI:** Gross income of: $1200 if single, $2400 if married or head of family.	$1200 if single, $2400 if married or head of family, $400 for each dependent.	Return and payment due 15 April.	State of Missouri, Department of Revenue, Income Tax Department, P.O. Box 629, Jefferson City, Missouri.	$3000 of active-service pay exempt after 1950. Director of Revenue may allow extension of time for filing without penalty or interest until one year after discharge.
***MONTANA:** Gross income of: $600 if single, $1200 if married.	$600 if single; $1200 if married; $600 for each dependent; $600 additional for taxpayer and spouse if blind, 65 or older.	Return and payment due 15 April.	State of Montana, Board of Equalization, State Capitol Building, Helena, Montana.	None.
NEW HAMPSHIRE: Any amount of taxable interest or dividends. Joint returns not permitted.	$600 for each taxpayer.	Return and payment due 1 May.	State Tax Commission, Division of Interest and Dividends, Box 345, Concord, N.H.	None, except as provided by the Soldiers' and Sailors' Civil Relief Act.

SUMMARY OF INCOME-TAX LAWS OF STATES AND POSSESSIONS OF THE UNITED STATES — Continued

Lowest Amount Of Income Which Requires Residents To File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
NEW JERSEY:				
Combined net income and net capital gain of $600, combined gross income and net capital gain of $5000 if derived from N.J. by N.Y. resident or from N.Y. by N.J. resident.	Same as federal, plus tax credit of: $10 if single; $12.50 if married and filing separately; $25 if married and filing jointly, or head of household.	Return due 1 April. Fiscal year taxpayers file on or before the first day of the fourth month following the end of such fiscal year. Payment with return.	New Jersey State Emergency Transportation Tax Bureau, Division of Taxation, Trenton 25, New Jersey.	All active service pay exempt. Persons in active service with the armed forces of the United States who may be prevented, by distance or injury, or hospitalization arising out of such service, may be allowed an extension of 6 months for filing.
NEW MEXICO:				
Same as federal.	Same as federal.	Return due 15 April. Payment with return or in four equal installments.	State of New Mexico, Bureau of Revenue, Income Tax Division, P. O. Box 451, Sante Fe, New Mexico.	None.
*NEW YORK:**				
If federal income tax return is required to be filed or if New York adjusted gross income exceeds exemptions.	Same as federal, plus tax credit of: $10 if single, $12.50 if married and filing separate returns, $25 if married and filing joint return; head of household or surviving widow or widower.	Return and payment due 15 April.	New York State Income Tax Bureau, Gov. A. E. Smith State Office Building, Albany 1, New York.	When not entitled to coverage under sec. 605(a) below, — then $100 per month of active service pay (other than for training) is excluded from 1 October 1961 to 30 June 1963, or the date on which no reserve component unit originally called to active service from New York State remains on such active service, whichever occurs first. Use N. Y. Form IT - 201 - MS. Obtain from New York State Income Tax Bureau, Albany 1, N. Y.

***Note:* Sec. 605(a) of the New York State Income Tax Law provides in part: "A resident individual means an individual: (1) who is domiciled in this state, unless he maintains no permanent place of abode in this state, (2) maintains a permanent place of abode elsewhere, and (3) spends in the aggregate not more than thirty days of the taxable year in this state, * * *"

*NORTH CAROLINA:				
Gross income of $1000 if single or a married woman with separate income, $2000 if a married man. Gross income from business or profession in excess of personal exemption.	$1000 if single or a married woman, $2000 if married man or head of a household, $2000 if widow or widower with minor child, $300 for each dependent, $1000 additional to blind taxpayer.	Return due on or before 15 April. Payment with return for any portion not paid in advance by withholding or estimated taxes.	State of North Carolina, Department of Revenue, Individual Income Tax Division, Raleigh, North Carolina.	None.
NORTH DAKOTA:				
Net income of: $600 if single or separated from spouse, $1500 if married or head of household. Gross income of $5000.	$600 if single; $1500 if married or head of household; $600 for each dependent; $600 additional for taxpayer and spouse if blind, 65 or older.	Return due 15 April. Payment with return or in installments if tax exceeds $100.	State of North Dakota Office of Tax Commissioner, State Capitol Building, Bismarck, North Dakota.	All active-service pay is exempt.

OHIO:

No individual State income tax, but residents of some Ohio cities and municipalities may be liable for local income taxes. Canton, Cincinnati, Columbus, Dayton, Springfield, Toledo and Youngstown exempt all military pay.

Lowest Amount Of Income Which Requires Residents To File Returns	*Personal Exemptions and Tax Credits*	*Due Date for Return and Payments*	*Title and Address of Taxing Authority*	*Exclusions and Deferments for United States Armed Forces Personnel*
*OKLAHOMA: Gross income of: $1000 if single, $2000 if married.	$1000 if single, $2000 if married or head of family, $500 for each dependent.	Return and payment due 15 April.	Oklahoma Tax Commission, State of Oklahoma, Income Tax Division, Oklahoma City 5, Okla.	$1500 of active-service pay is excluded. Filing and paying by member outside the United States or hospitalized in the U. S. deferred until 15th day of 3rd month following return or discharge from hospital.
OREGON: Net income of $600 if single, $1200 if married. Gross income of $4000.	$600 if single or separated, $1200 if married, $600 for each dependent plus $1 tax credit for each $100 of support furnished each who does not receive 50% support from taxpayer, $600 additional for taxpayer or spouse if blind plus credits of $18 if blind and $12 if age 65.	Return due 15 April. Payment with return or in installments if tax exceeds $25.	Oregon State Tax Commission, Income Division, 100 State Office Bldg., Salem, Oregon; or State Tax Commission, 1400 S. W. 5th Avenue, Portland 1, Oregon.	$3000 of active-service pay is excluded. Returns and payment of tax deferred for 90 days after return to U. S. from period af duty exceeding 90 days outside continental United States.
PENNSYLVANIA: No individual income tax, but residents of some Pennsylvania cities and municipalities may be liable for local income taxes. Philadelphia and Pittsburgh exempt all Navy and military pay.				
*PUERTO RICO: Gross income in excess of: $800 if single, separated from spouse or if head of family, $2000 if married and living with spouse.	$800 if single or separated from spouse, $2000 if married or head of family, $400 for each dependent.	Return due 15 April. Payment with return or in two equal installments where no declaration of estimated tax was elected.	Commonwealth of Puerto Rico, Department of the Treasury, Bureau of Income Tax, P. O. Box 9833, Santurce, Puerto Rico.	None.
*SOUTH CAROLINA: Gross income of $800 or more.	$800 if single, $1600 if married and filing jointly or head of a household. $800 for each dependent, $800 additional for taxpayer and spouse if blind.	Return and payment due 15 April.	South Carolina Tax Commission, Income Tax Division, Drawer 420, Columbia 1, S. C.	Same computations as for federal return.
TENNESSEE: Income over $25 from dividends and interest.	None, except income of blind persons is exempt.	Return and payment due 15 April.	State of Tennessee, Department of Revenue, Income Tax Division, War Memorial Bldg., Nashville 3, Tennessee.	None.
UTAH: Gross income of $600 if single or separated from spouse, $1200 if married.	$600 if single, $1200 if married, $600 for each dependent, $600 additional for taxpayer and spouse if blind.	Return and payment due 15 April.	State Tax Commission of Utah, 118 State Capitol, Salt Lake City 14, Utah.	If in foreign country 510 days of any 18 consecutive months may file as a non-resident for each taxable year while so absent for 3 months or more.
*VERMONT: Gross income of $500 ($1000 if 65 or older).	$500 for taxpayer; $500 for spouse; $500 for each dependent; $500 additional for taxpayer and spouse if blind, 65 or older.	Return and payment due 15 April.	Commissioner of Taxes, Vermont Department of Taxes, Montpelier, Vermont.	Same as federal. Members serving outside Vermont may defer paying tax on service pay until 6 months after discharge.

SUMMARY OF INCOME-TAX LAWS OF STATES AND POSSESSIONS OF THE UNITED STATES — Continued

Lowest Amount Of Income Which Requires Residents To File Returns	Personal Exemptions and Tax Credits	Due Date for Return and Payments	Title and Address of Taxing Authority	Exclusions and Deferments for United States Armed Forces Personnel
VIRGINIA: Gross income of $1000.	$1000 for taxpayer; $1000 for spouse; $200 for each dependent plus $800 to unmarried taxpayer who has a dependent father, mother, son, daughter, sister, or brother; $600 additional for taxpayer and spouse if blind, 65 or older.	Return due 1 May. Payment in full, with return to Treasurer of county or city where return is filed.	Commissioner of Revenue of the county or city of which taxpayer is a resident.	None.
WEST VIRGINIA:* If federal return is required, or if West Virginia adjusted gross income exceeds exemptions.	Same as federal.	Same as federal.	West Virginia State Tax Commissioner, Income Tax Division, Charleston 5, West Va.	None.
WISCONSIN: $1400 combined net income of married couple. Gross income of $600.	Tax credit of: $7 if single, $14 if married or head of family, $7 for each dependent.	Return due 15 April. Payment with return or in installments if tax exceeds $20.	State of Wisconsin, Department of Taxation, Room 1000, State Office Building, Madison 2, Wisconsin, or Assessor of Income for county in which taxpayer resides.	$1000 of active-service or reserve pay excluded. Extension of time for filing granted to members on duty abroad until 15th day of 6th month following close of taxable year.

***Note:* Sec. 7 of West Virginia Income Tax Law provides in part: "Resident individual means an individual who is domiciled in this state unless he maintains no permanent place of abode in this state, maintains a permanent place of abode elsewhere, and spends in the aggregate not more than 30 days of the taxable year in this state, . . ."

Naval Destroyer School Provides Six-Month Training for Junior Officers

The U. S. Naval Destroyer School, an ambitious new concept in the training of junior naval officers for destroyer duty, was officially opened in January at Newport, R. I.

VADM William R. Smedberg, III, USN, Chief of Naval Personnel, was principal speaker.

Designed to "provide the Destroyer Force, through a system of functional education and training, with officers professionally qualified and motivated to function as effective naval leaders on board ship," the new course will last 26 weeks, including three weeks of at-sea training. Thirty-eight lieutenants (junior grade) and one lieutenant made up the first class, which convened 8 January. Later classes, however, (they'll convene approximately every three months) are expected to contain about 60 students.

That official-sounding explanation of the new school's mission, above, tells only part of the story. Heretofore, junior officers slated for destroyer duty received specialized training in just one aspect of destroyer operations — at the Destroyer Engineering, Gunnery or Communications Schools.

Newer and more complex weapons systems and engineering plants in modern destroyers have made it increasingly evident that prospective destroyer department heads not only need a thorough knowledge of the capabilities and limitations of the particular shipboard department to which they will be assigned, but of the other departments as well. Hence, the disestablishment of the officers' courses of instruction at the three separate schools, and the advent of the new Naval Destroyer School, capable of providing instruction in tactics, weapons, engineering and a variety of other naval science subjects in a single course and under one roof.

All-Navy Cartoon Contest
J.R. Odbert, DM2-P1, USN

A thorough renovation of the former Destroyer Engineering School provided the site for the new school. Now, in addition to improved classroom facilities, it contains a complete marine engineering steam plant.

Selected DESLANT enlisted men will attend the school, too. They'll take courses in the operation and maintenance, including assembly and disassembly, of fireroom and engineroom machinery.

The destroyers USS *Abbot* (DD 629) and *The Sullivans* (DD 537) will serve as the first school ships for the at-sea portion of the course.

List of New Motion Pictures and TV Series Available to Ships and Overseas Bases

The latest list of 16-mm feature movies and TV series available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Two one-hour TV shows are packaged together for a 108-minute program, but may be shown only aboard ship. TV series available for selection are: *Rawhide* and *Stagecoach West* — Westerns; *Perry Mason* and *Michael Shayne* — Melodramas.

Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

Motion Pictures

Ada (1855) (C) (WS): Drama; Susan Hayward, Dean Martin.

Secret of Monte Cristo (1856) (C) (WS): Melodrama; Rory Calhoun, Patricia Bredin.

Back Street (1857) (C): Drama; Susan Hayward, John Gavin.

Nikki, Wild Dog of the North (1858) (C): Melodrama; Jean Coutu, Emile Genest.

A Thunder of Drums (1859) (C) (WS): Drama; Richard Boone, George Hamilton.

The Last Time I Saw Archie (1860): Comedy; Robert Mitchum, Jack Webb.

The Sergeant Was a Lady (1861): Comedy; Martin West, Venetia Stevenson.

The Naked Edge (1862): Drama; Gary Cooper, Deborah Kerr.

Voyage to the Bottom of the Sea (1863) (C) (WS): Melodrama; Walter Pidgeon, Joan Fontaine.

The Purple Hills (1864) (C) (WS): Melodrama; Gene Nelson, Joanna Barnes.

Susan Slade (1865) (C): Drama; Troy Donahue, Connie Stevens.

The Young Doctors (1866); Drama; Dick Clark, Eddie Albert.

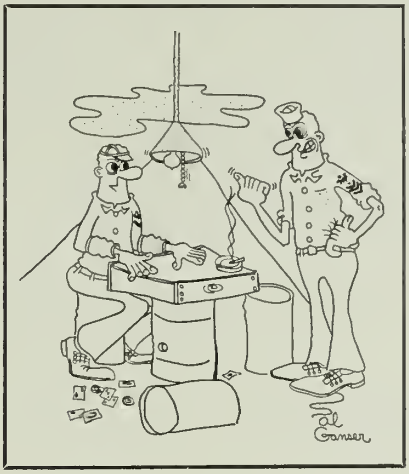
Guns of Navarone (1867) (C) (WS): Drama; Gregory Peck, David Niven.

Comancheros (1868) (C) (WS): John Wayne, Stuart Whitman.

Goodbye Again (1869): Drama; Ingrid Bergman, Yves Montand.

Murder, She Said (1870): Drama; Margaret Rutherford, Arthur Kennedy.

All-Navy Cartoon Contest
A. P. Ganser, MM2, USN



"Now what gives you the idea I was playing cards?"

The Hustler (1871) (WS): Drama; Paul Newman, Jackie Gleason.

Tarters (1872) (C) (WS): Melodrama; Victor Mature, Orson Welles.

Breakfast at Tiffany's (1873) (C): Comedy; Audrey Hepburn, George Peppard.

Splendor in the Grass (1874) (C): Drama; Natalie Wood, Pat Hingle.

Television Programs

5228: TV-1 *Rawhide* — Rojo Canyon. TV-2 *Michael Shayne* — Call for Michael Shayne.

5229: TV-1 *Perry Mason* — Startled Stallion. TV-2 *Stagecoach West* — The Marker.

5230: TV-1 *Perry Mason* — Fraudulent Foto. TV-2 *Stagecoach West* — Red Sand.

5231: TV-1 *Perry Mason* — Sardonic Sergeant. TV-2 *Stagecoach West*—The Unwanted.

5232: TV-1 *Perry Mason* — Garrulous Gambler. TV-2 *Rawhide*—Gloomy River.

5233: TV-1 *Perry Mason* — Howling Dog. TV-2 *Rawhide* — Middle of Nowhere.

5234: TV-1 *Perry Mason* — Substitute Face. TV-2 *Rawhide* — The Road Back.

5235: TV-1 *Perry Mason* — Wary Wildcatter. TV-2 *Rawhide* — The Lost Idol.

5236: TV-1 *Perry Mason* — Singing Skirt. TV-2 *Rawhide* — The Captive.

5237: TV-1 *Perry Mason* — Golden Fraud. TV-2 *Rawhide* — Fish Out of the Water.

5238: TV-1 *Perry Mason*—Footloose Doll. TV-2 *Rawhide* — Top of the World.

5239: TV-1 *Perry Mason*—Pint Sized Client. TV-2 *Rawhide* — Big Blowout.

5240: TV-1 *Perry Mason* — Dangerous Dowager. TV-2 *Rawhide* — Boomerang.

5241: TV-1 *Perry Mason* — Credulous Quarry. TV-2 *Rawhide*—Brother's Keeper.

5242: TV-1 *Perry Mason* — Hesitant Hostess. TV-2 *Stagecoach West* — The Big Gun.

5243: TV-1 *Perry Mason* — The Romantic Rogue. TV-2 *Stagecoach West* — Fort Wyatt Crossing.

Applications Are Open for Enlisted Men to Qualify For Investigator Job Code

Chances are you've dreamed, at one time or another, of being an intelligence agent.

For most of us, that is just a passing interest. For others, however, it is a serious desire and these are men the Navy needs in the NEC Code 9592 (Investigator) program.

If you are the type, you'll need more than that to qualify. You must, first of all, NOT be an RD, SO, FT, ET, RM, CT, MA, TD, AT, AQ, PR, AM, AO, AC, HM or DT and NOT hold an NEC designator in the 33XX series. These ratings are now considered critical, and men from them will not be considered.

You must, if you wish to be an investigator (NEC 9592), meet these requirements:

- Be a volunteer, male, in pay grade E-6 or higher.
- Have a minimum GCT of 60, clerical of 55, or GCT/CLER of 115.
- Have a high school education or the equivalent.
- Be eligible for access to top secret material.
- Have no record of offenses involving moral turpitude and no record of mental illness or alcoholism.
- Be financially solvent, with no record of excessive indebtedness.
- Be recommended by your commanding officer. He should comment on your: tact, diplomacy and judgment; bearing and general appearance (in this connection unusual mannerisms, speech defects, physical features or handicaps — which might bring undue attention to you — are disqualifying); ability to discuss subjects of naval and general interest; dependability and resourcefulness; and your general suitability for independent duty in or out of uniform. Comments should also be

included about the ability of your dependents, if any, to adapt to living conditions in a foreign country.

In addition, you must be recommended by the nearest District Intelligence Officer, or the Intelligence Officer, Potomac River Naval Command; Commander in Chief, U.S. Naval Forces, Europe; Commander, U.S. Naval Forces, Marianas; Commander, U.S. Naval Forces, Philippines; or Commander, U.S. Naval Forces, Japan.

To get the latter recommendation, you'll have to appear before the appropriate intelligence officer for an interview by the Agent Screening Board established for that purpose. This board will endorse your application and forward it, via the intelligence officer concerned, to the Director of Naval Intelligence in Washington, D.C.

Your application should include detailed statements about your eligibility and qualifications, in addition to a completed Statement of Personal History (DD Form 398) in quadruplicate, Fingerprint Card (OpNav Form 5510-397, Rev. 7-58) and two photographs (front and profile) attached to an eight by ten-inch sheet of bond paper. The photograph should show you in uniform, uncovered.

If, at any time after you are accepted as an investigator, you are considered unsuitable or ineligible for this type of work, the Director of Naval Intelligence can revoke your designator.

Designation as an investigator does not necessarily mean early transfer to an intelligence billet. These are limited in number and are normally filled by personnel available for transfer under Seavey/Shorvey procedures.

Full information on this program may be obtained from OpNav Inst. 1221.3.

Correspondence Courses For Officers, Enlisted Men

Three new enlisted correspondence courses and one new officer course have been issued by the Bureau of Naval Personnel, and four enlisted courses and one officer course have been discontinued.

Enlisted correspondence courses for active-duty Navymen will be administered, in most cases, by your local command.

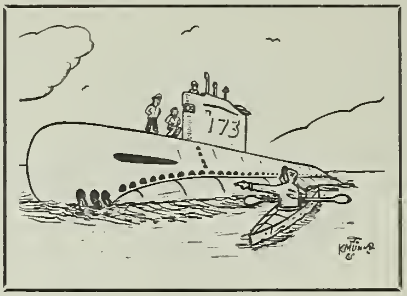
New Courses

ECC Aviation Structural Mechanic E 3 & 2 (NavPers 91622-1)
ECC Yeoman 1 & C (NavPers 91416-3)
ECC Construction Mechanic 1 & C (NavPers 91581-2)
OCC Supply Afloat (NavPers 10980-B)

Discontinued Courses

ECC Yeoman C (NavPers 81416-2C)
ECC Yeoman 1 (NavPers 91415-2A)
ECC Mechanic 1 (Navpers 91580-1A)
ECC Mechanic C (NavPers 91581-1)
OCC Supply Afloat (NavPers 10980-A1)

All-Navy Cartoon Contest
W.K. Munn, ENC(SS), USN



"He seems to be saying, 'They went thataway.'"

Opportunities Open Up for Qualified Yeomen as Naval Intelligence Clerks

If you are a yeoman third class or above, and have a GCT of 55 or higher, you could be in line for some rather interesting duty. Men with these (and a few other) qualifications are being considered for the job code of Naval Intelligence Clerk (NEC 2505).

To be eligible, in addition to meeting the above qualifications, you must:

- Have undergone a satisfactory background investigation.
- Be eligible for access to top secret material.
- Have no record of offenses involving moral turpitude and no record of mental illness or alcoholism.
- Have conversational capability in a foreign language, or demonstrate an aptitude for learning one.
- Be financially solvent, with no record of excessive indebtedness.
- Be recommended by your commanding officer. He must comment on your tact, diplomacy and judgment; ability to discuss subjects of naval and general interest; dependability and resourcefulness; and general suitability for independent duties in or out of uniform. Comments should also be included about the ability of your dependents, if any, to adapt to living in a foreign country. Since most YN-2505 sea billets are overseas, applicants should not exceed the maximum dependency limitation for overseas duty set forth in Art 6.32, *Enlisted Transfer Manual.*

If you're interested, and are qualified, you should forward your application to the Director of Naval Intelligence (Op-923P). This application, with specific and detailed statements about your eligibility and qualifications, should include a completed Statement of Personal History (DD Form 398) in quadruplicate, fingerprint card (OpNav Form 5510-2), National Agency Check Request (OpNav Form 5510-397) (Rev. 7-58), plus two photographs (front and profile views) of you in uniform, uncovered.

After your application has been reviewed by the Director of Naval Intelligence, you may be required to complete a written test to determine your aptitude for learning foreign languages. This is normally only required of men who are not already qualified in at least one foreign language.

Once you have been designated a Naval Intelligence Clerk (NEC 2505), you will probably be assigned to a 2505 billet when you are due for regular reassignment. Men selected for this new designator will not normally be reassigned before their regular rotational tour dates.

After you have been selected as a 2505, don't think you'll be allowed to rest on your merits. After a period of on-the-job observation and evaluation, you will be allowed to gain experience in a wide range of intelligence matters.

As a general rule, no specialized courses of instruction are planned for intelligence clerks. If you are selected, however, and have any special training, experience or qualifications, DNI should be told by letter or speedletter.

Those men who previously held the Naval Intelligence Clerk code of 2503 must submit new applications if they wish to be considered for NEC 2505.

Full information on the program may be found in OpNav Instructions 1221.4 and 1221.1A.

THE BIG BLOW

Philippine Sea, 1944

ALL HANDS BOOK SUPPLEMENT

In late 1944, the U. S. Navy was busy with its conquest of the Pacific. Luzon had been severely attacked. There appeared to be nothing to halt the successful drive against the Philippines, then Japan. Then, suddenly, the entire Seventh Fleet was swept by an unsuspected hurricane which very nearly changed the course of history.

The following account is based in part on various ship's histories, published by the Naval History Division, Navy Department. Two other important sources of the facts reported below are the History of United States Naval Operations in World War II, *Vol. XIII, by Samuel Eliot Morison, published by Little, Brown & Co.; and* Battle Report, *Vol. V, by Walter Karig, published by Rinehart and Co., 1949.*

IT WAS TIME TO GO. As green water smashed the glass windscreen of the destroyer, LCDR James A. Marks, USN, commanding officer of USS *Hull* (DD 350), stepped off the bridge into the sea. He was but one of a handful of *Hull* men who survived.

Hull was one of three destroyers which capsized and sank that day, 18 Dec 1944, as the Third Fleet encountered in the Philippine Sea one of the worst storms in the history of the Navy. More damage was inflicted than by any other storm since the famous hurricane at Apia, Samoa, in March 1889. In addition to the loss of three DDs, four light carriers, three escort carriers, five destroyers, two escort destroyers, one light cruiser and one Fleet oiler were among the ships damaged. A total of 146 airplanes were lost, including eight blown overboard from battleships. The lives of almost 800 personnel were lost.

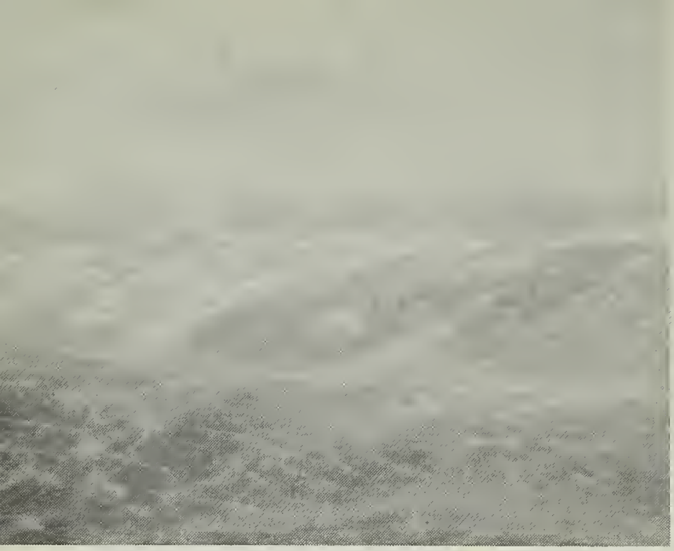
STORMS HAVE PLAYED an important role in the history of sea warfare when, on the day of battle, the ships couldn't run away.

The Greeks (and a storm) won an important victory over the Persians when the storm broke up the Persian fleet off the promontory of Mount Athos in 492 B. C. Dirty weather, as well as Drake, helped defeat the Spanish Armada and then, after the battle, helped destroy what was left of the Spaniards off the coast of Ireland. The Japanese homeland was saved from invasion in 1281 by a "Divine Wind" which shattered a powerful Mongol fleet of Kublai Khan.

Another "divine wind" almost, but not quite, again saved Japan in the more recent past, when elements of the Third Fleet, preparing for attack on the Philippines, were struck by a typhoon.

Task Force 38 at this time was composed of seven *Essex*-class and six light carriers, eight battleships, four heavy and 11 light cruisers, and about 50 destroyers. The fuel supply of many of these ships, particularly the destroyers, was dangerously low following a three-day strike on Luzon.

THE SEA WAS MAKING up all day but the waves were from the same direction as the northerly wind (which was not above 30 to 40 knots). Wind and



FLEXING ITS MUSCLES — From early in the day it was obvious that it was going to be rough.

sea, however, had already made refueling difficult.

USS *Maddox* (DD 731), a new 2200-ton destroyer, required three hours' work to obtain 7000 gallons from the oiler *Manatee*. The hose then parted and she had to cut the towline, narrowly avoiding a collision. Two hoses parted on *New Jersey* when she tried to fuel the destroyers *Hunt* and *Spence*.

The escort carrier *Kwajalein* (CVE 98) one of the replacement-plane CVEs that belonged to an oiler group, was unable to transfer pilots by breeches buoy, and canceled air operations at noon. Her deck crew then concentrated on respotting and relashing planes, which were secured three ways with steel cables. It was too rough for escort carriers to recover CAP (combat air patrol). Two planes still aloft at 1500 were flagged off from their respective carriers and their pilots were ordered to bail out. They were rescued by a destroyer.

At sunset, a sinister afterglow remained in the sky. The sea was deep black except where the wind whipped off wave crests into spindrift. On board *Kwajalein,* then heading almost dead into the wind, as each wave rolled under, the entire bow would come out of the water, hover for a few seconds, and then crash, taking the flight deck almost to sea level. Plates were clanging and snapping, and ripples ran up and down the steel hangar deck. The forward lookouts, normally stationed in the catwalks, were ordered to secure. Because of the mounting seas, zigzagging was canceled after sunset.

By 0800, *Kwajalein* had to heave to and, with both engines ahead full and with wind on the starboard bow, made a few knots leeway. Salt water was blowing horizontally at bridge level. There seemed to be no separation between sea and sky. The sound of the wind in the rigging, especially in the large radar bedspring, was frightening. The battle ensign was reduced to a small scrap showing two stars.

BY THE AFTERNOON of 18 December, Task Force 38 and its fueling groups were scattered over a space estimated at 50 by 60 miles. Except for the battleships, all semblance of formation had been lost. Every ship was laboring heavily; hardly any two were in visual contact; many lay dead, rolling in the trough of the sea; planes were crashing and burning on the light carriers.

From the islands of the carriers and the pilothouses of destroyers, men looked out on a scene they had never seen before and which few of them would ever see again. The weather was so thick that sea and sky seemed to form one element. At times the rain was so heavy that visibility was limited to three feet, and the wind so strong that, to venture out on the flight deck, a man had to crawl on his belly.

Occasionally the storm-wrack would part for a moment, revealing escort carriers crazily rising up on their fantails or plunging bow under, destroyers rolling drunkenly in hundred-degree arcs or beaten down on one side.

The big carriers lost no planes, but the extent of their rolls may be gauged by the fact that *Hancock's* flight deck, 57 feet above the waterline, scooped up green water. The battleships took the seas without strain, but the cruiser *Miami* (CL 89) took a series of heavy seas that buckled her shell, main deck and longitudinals from the stem to about frame 22.

The light carriers had a bad time because the rolling and pitching caused plane lashings on hangar decks to part, and padeyes to pull out of flight decks. Planes went adrift, collided and burst into flames. *Monterey* caught fire at 0911 and lost steerageway a few minutes later. The fire was brought under control within half an hour and the commanding officer decided to let the ship lie dead in the water until temporary repairs could be made.

Monterey lost 18 aircraft burned in the hangar deck or blown overboard and 16 seriously damaged. *Cowpens* lost seven planes overboard and caught fire from one that broke loose. However, the fire was brought under control promptly. *Langley* rolled through 70 degrees; *San Jacinto* had a plane become adrift on the hangar deck which wrecked seven others. She also suffered damage from salt water that entered through punctures in the ventilating ducts.

SO MUCH FOR THE big picture. What about the destroyers *Hull, Spence* and *Monaghan*, that were lost? Here is the story of *Hull* as told by her commanding officer, LCDR Marks:

"I have served in destroyers in some of the worst storms in the North Atlantic and believe that no wind could be worse than that I have just witnessed.

"Shortly after twelve o'clock the ship withstood what I estimated to be the worst punishment any storm could offer. She had rolled about 70 degrees and righted herself just as soon as the wind gust reduced a bit. Just at this point the wind increased to an estimated 110 knots. The force of the wind laid the ship steadily over on her starboard side and held her down in the water until the seas came flowing into the pilothouse.

"The ship remained over on her starboard side at an angle of 80 degrees or more as the water flooded into her upper structures. I remained on the port wing of the bridge until the water flooded up to me, then I stepped off into the water as the ship rolled over on her way down. The suction effect of the hull was felt but it was not very strong. Shortly after, I felt the concussion of the boilers exploding under water. I concentrated on trying to keep alive.

A TOTAL OF SEVEN officers and 55 enlisted men survived. Most were rescued by USS *Tabberer* (DE 418) through a million-to-one fluke. The storm, which at this point reached a velocity of 122 knots, had ripped away her mast and radio antennas and a radioman had gone on deck during a lull in the storm to repair the antennas.

Looking out over the water he saw a dim light on the surface and at once yelled, "Man overboard!" A man from *Hull* was pulled aboard. Instead of rendezvousing with the fleet, as had been her plan, *Tabberer* continued hunting for survivors of *Hull,* which was now known to have foundered.

The captain of *Tabberer* ordered the ship's searchlights to be turned on, knowing that there was no danger of attack by Japanese submarines in a sea like this, and had cargo nets dropped over the side to make it easier to bring survivors aboard. During the night he picked up 12 more men from *Hull* and the next day, 19 December, *Tabberer* found *Hull's* commanding officer who was so weak he had to be dragged aboard.

During the afternoon another officer from *Hull* was sighted floating about 60 feet from *Tabberer,* but even nearer was a large shark, which was apparently waiting for an opportune moment to attack. Men on *Tabberer* called to the officer to swim to the ship, while they began firing tommy guns to scare the shark away, but the officer was too exhausted to swim and the shark did not frighten easily. Finally, the ship's executive officer, LT Robert M. Surdam, USNR, dived in and brought the officer to the ship.

Later the same day, *Tabberer* found a group of seven *Hull* men clinging together, although they had been in the water for over 26 hours. One of the men had been the entire time in the water without a lifejacket, but he climbed aboard without assistance.

YET HULL WAS RELATIVELY LUCKY. Only 24 men were saved from *Spence.*

On 17 December, *Spence* (DD 512) prepared to refuel and so pumped out all the salt-water ballast in preparation for the job, making the ship less stable than under normal circumstances. Rough seas, however, prevented the ship from taking on additional fuel and the next morning, to conserve her dwindling 24-hour supply, she cruised to the east of Luzon with only one boiler in use. By ten that morning the ship was trapped in canyon-like troughs of sea water. The electrical board began to get wet from taking great quantities of water aboard in the continuous rolling of the ship.

After she went into a 72-degree roll to port, all the lights went out and the ship's pumps stopped. Her steering controls became damaged and she floundered helplessly on her port side. Mountainous waves swept the deck and tore lifeboats and rafts from their moorings.

Spence flopped completely over at about 1100 on 18 December. This is how *Spence's* supply officer LT A. S. Krauchunas, USNR, saw it:

"I sat on the edge of the bunk in the captain's cabin, discussing the seriousness of the storm with Doc, when a terrific roll threw me on my back against the bulkhead amid a shower of books and whatnots. On hands and knees I desperately made my way along the bulkhead until I dropped through a door leading into the narrow passageway which led to the main deck. From the light filtering through from above, I saw oily water rushing to engulf me. Turning, I saw a light shining down from the radio shack passageway. I scrambled up the width of the ladder and fled through this corridor. The water followed me, sealed off the radio shack passageway and trapped all below.

"There was no orderly jumping overboard, no systematic lowering of lifeboats or rafts — they had been torn from their moorings — but a matter of swimming desperately from the ship that was about to turn completely over.

"Approximately 70 men got off the ship, mainly from topside, the torpedo and radio shacks, bridge and passageways. Men began to collect from all directions until we finally had a group of 20 or so on our floater net. Time and again it was washed violently against the side of the ship by the action of the waves. We kept pushing ourselves off the port side of the ship until finally the net was freed."

Within five minutes their net was alone. Crowded with men, the net would ride three or four of the

MAKING READY — Every Navyman in Task Force 38 was well aware that the worst was yet to come.

STORM-TOSSED ship takes a pounding as ocean water engulfs it with salt-water mist and spray.

towering waves, only to have the next one break over them. Tons of water would drag them below the surface. One by one, as the men poked their heads through the waves, they would find their net 20 to 40 feet away and, in the fight to swim back, a few would fail to reach the net. Eventually, the group was whittled down to nine.

By the afternoon of 18 December, the storm had moderated, and an inventory was taken of supplies aboard the net. Food and medical kits had been torn away, but a kit of flares, a hatchet and two water kegs were found. During the afternoon the two water kegs repeatedly broke away from the net and each time were recovered by LT Krauchunas and Water Tender C. F. Wohlleb.

On the morning of 19 December the men had their first drink. At 1000 a search plane was spotted about eight miles away. One of the dye markers was used but the plane did not see it. That afternoon they sighted an overturned table floating in the water. For nearly two hours they swam, pulling the net with them, during which time the distance between them and the table narrowed to 100 yards.

By nighttime, J. P. Heater, Seaman First Class, who had been injured when the ship was lost, became unconscious and Wohlleb devoted his energies to keeping him on the net. LTJG John Whelan had been drinking salt water and was somewhat dazed, while the steady drain on the vitality of ENS George W. Poer was beginning to show. He would float away from the net and the men would shout, causing him to turn and swim back, exclaiming "Where have I been?" Poer repeated this twice and then, about 2300, floated away for the last time.

LTJG Whelan had lost consciousness by now and LT Krauchunas and Quartermaster Edward F. Treceski took turns holding him. Heater died.

During the early morning hours of 20 December, one of the water kegs broke loose and during the effort to recover it, LTJG Whelan disappeared from the net, leaving only six of the original 20.

In the distance, flashes of light were again seen on the horizon. After a time they saw an escort carrier bearing down upon them. Its shape could be seen silhouetted against the sky along with shadowy forms of men at work on the flight deck. They yelled, but she disappeared into the darkness. However, the sight was hopeful, for carriers did not travel without escort.

Half an hour later a destroyer appeared on the horizon. It stopped about 200 yards from them, its searchlights playing over the water. Their voices did not carry far enough and the searchlight beams did not happen to fall in their direction. The destroyer turned and faded into the darkness.

The men began to cry, curse and pray. However, Wohlleb spotted an escort destroyer from the opposite direction which came to within 100 yards. A voice came out of the darkness: "Survivors in the water, we hear you but cannot see you. Yell twice if we are to turn right and once if we should proceed straight ahead."

Two loud yells brought the long-awaited rescue with dry clothes, hot coffee and a warm bunk.

The experience of USS *Monaghan* (DD 354) was similar to that of *Hull* and *Spence*. This is how it appeared to J. C. McCrane, Water Tender Second Class and Robert J. Darden, Machinist's Mate Second Class:

"Before the final roll there were 40 or 50 of us in the after gun shelter. We stopped work and hung on. We began to get scared. All of us were praying like we never prayed before, some of us out loud, too. When it came, someone threw open the hatch and we started to scramble out. Under the circumstances, most of us were pretty orderly. The fellows started helping each other, particularly the shorter men who couldn't reach the hatch.

"I climbed out of the hatch and stood on a bulkhead. The waves were knocking me about, but I didn't want to shake loose because I saw what happened to the men who had jumped as soon as we heeled. Finally a big wave shook me loose and I went scrambling along the ship until I was lucky enough to grab a depth charge rack. I walked along the torpedo tubes. Another wave hit me and I went into the air.

"The next thing I knew I was struggling in the water trying to keep from being pounded against the ship. Water and oil were blowing against my face. I was choking and beating the water with my arms and legs like a puppy. I saw I wasn't getting anywhere so I calmed down and got away gradually, but I was losing strength when suddenly someone yelled: "Hey Joe, grab that raft in back of you." Eventually 13 of us got to it and hung on the sides like they did in a movie I saw.

"About this time *Monaghan* filled with water and went down. It looked to us as though there was no other raft. We looked around for others to help and helped some of the badly injured to get on the raft.

"Before we got the bottom of the raft down, it turned over four or five times. This meant we had to fish around and help the wounded back, and we were getting pretty weak and tired. After we got the bottom down we all climbed aboard that first night.

"We broke out the emergency rations — canned meat, hard biscuits and stuff like that — and the water. We were limited to a biscuit and a cup of water two or three times a day. As soon as we opened the meat, the sharks started nosing around.

"The next day we were all confident we would be picked up. Planes passed over us but it was still pretty rough and our little raft must have been hard to see. A TBF went right over us. That night a fellow died after he went berserk and started drinking salt water. We tried to stop him, but couldn't. Another fellow started swimming around the raft, and we lost him. Holland and Guio died of injuries.

"The next day and night passed the same way. One man went over the side and was lost and two more swam to an unoccupied raft and were never seen again.

"By the morning of the third day, things were beginning to look pretty grim. Pretty soon we saw some fighter planes come over and knew we were either near land or one of our carriers. Those two planes banked over us and dropped some water markers. Twenty minutes later we saw the most wonderful sight in the world, a tincan steaming at full speed right at us."

For three days ships and aircraft combed the area for missing men. The final total of men rescued included seven officers and 55 enlisted men from Hull, *one officer and 23 men from* Spence, *and the six men from* Monaghan. Tabberer, *herself dismasted by the storm, had rescued 55 of them. About 790 officers and men were lost or killed, and 80 were injured.*

The losses incurred necessitated an inquiry, of course. Why should the three destroyers have been lost, if not the others?

As a result, a circular letter addressed by CINCPACFLT *to the Pacific Fleet and naval shore activities concerning the responsibilities of a commanding officer in choosing between seeking safety in a storm and attempting to meet his commitments has become almost a classic. The letter is quoted in part below*:

"The Commander in Chief, Pacific Fleet, wishes to emphasize that to insure safety at sea, the best that science can devise must be regarded only as an aid and never as a substitute for the good seamanship, self-reliance and sense of ultimate responsibility which are the first requisites in a seaman and naval officer.

"A hundred years ago, a ship's survival depended almost solely on the competence of her master and on his constant alertness to every hint of change in the weather. To be taken aback or caught with full sail on by even a passing squall might mean the loss of spars or canvas; and to come close to the center of a genuine hurricane or typhoon was synonymous with disaster.

"Seamen of the present day should be better at forecasting weather at sea than were their predecessors. The general laws of storms, and the weather expectancy for all months of the year in all parts of the world are now more thoroughly understood, more completely catalogued and more readily available in various publications. But just as a navigator is held culpable if he neglects "Log, Lead and Lookout," through blind faith in his radio fixes, so is the seaman culpable who regards personal weather estimates as obsolete and assumes that if no radio storm warning has been received, then all is well, and no local weather signs need cause him concern.

"The most difficult part of the whole heavy-weather problem is of course the conflict between the military necessity for carrying out an operation as scheduled, and in the possibility of damage or loss to our ships in doing so. For this, no possible rule can be laid down. The decision must be a matter of calculated risk either way. It should be kept in mind, however, that a ship which founders or is badly damaged is a dead loss not only to the current operation but to future ones, that the weather which hinders us may be hindering the enemy equally, and that ships which, to prevent probable damage and possible loss, are allowed to drop behind, or to maneuver independently, may by that very measure be able to rejoin later and be of use in the operation.

"But the degree of a ship's danger is progressive and at the same time indefinite. It is one thing for a commanding officer, acting independently in time of peace, to pick a course and speed which may save him from a beating from the weather, and quite another for him, in time of war, to disregard his mission and his orders and leave his station and duty.

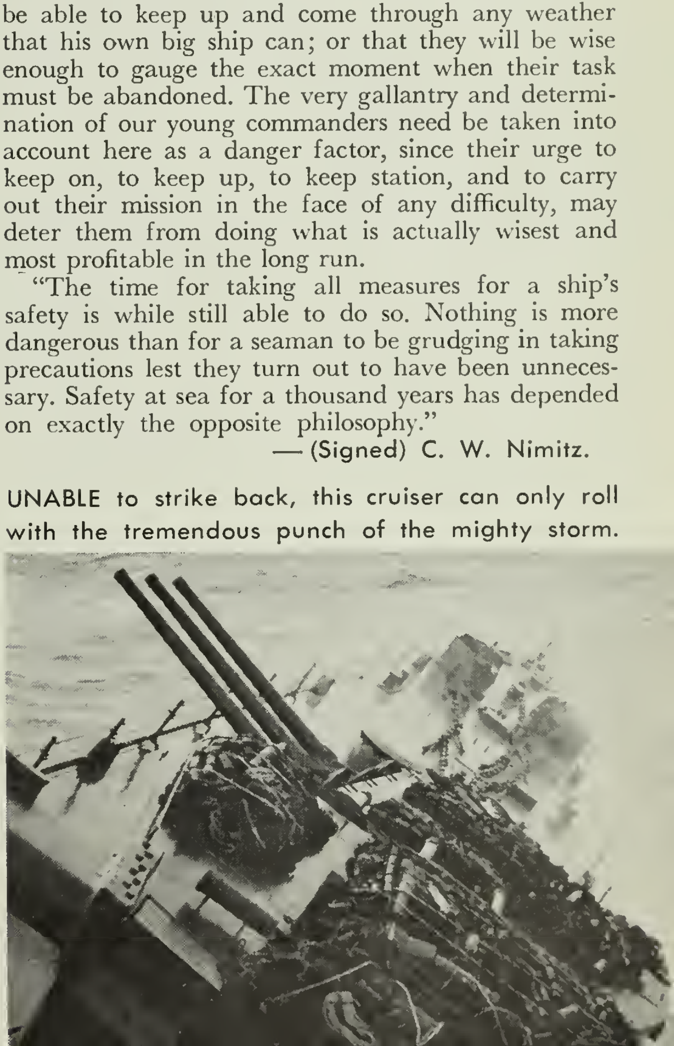
"It is here that the responsibility rests on unit, group, and force commanders, and that their judgment and authority must be exercised. They are of course the ones best qualified to weigh the situation and the relative urgency of safety measures versus carrying on with the job in hand.

"It is most definitely part of the senior officer's responsibility to think in terms of the smallest ships and most inexperienced commanding officers under him. He cannot take them for granted, give them tasks and stations and assume either that they will be able to keep up and come through any weather that his own big ship can; or that they will be wise enough to gauge the exact moment when their task must be abandoned. The very gallantry and determination of our young commanders need be taken into account here as a danger factor, since their urge to keep on, to keep up, to keep station, and to carry out their mission in the face of any difficulty, may deter them from doing what is actually wisest and most profitable in the long run.

"The time for taking all measures for a ship's safety is while still able to do so. Nothing is more dangerous than for a seaman to be grudging in taking precautions lest they turn out to have been unnecessary. Safety at sea for a thousand years has depended on exactly the opposite philosophy."

— (Signed) C. W. Nimitz.

UNABLE to strike back, this cruiser can only roll with the tremendous punch of the mighty storm.



TAFFRAIL TALK

MOST OF US, we're sure, in our travels through this man's Navy, have at one time or another come to the conclusion that we were being overworked. When a division gets shorthanded, as it often does, there's usually no other solution than for those remaining on the job to shoulder some additional burdens.

We doubt, however, that very many of us have spent a busier stretch than the 24-on, none-off tour of duty RADM Clifford H. Duerfeldt pulled recently. For some two weeks early last January, the admiral wore *seven* hats.

Not that the veteran naval aviator has a soft touch anytime, mind you. Four of those hats – as Commander Barrier Force Pacific; Commander Fleet Air Hawaii; Commander Naval Air Bases, 14ND; and Commander Fleet Air Detachment, Barber's Point – are his for the wearing the year around. Under those circumstances, it probably wasn't too much of a shock when he was asked to take over RADM Robert L. Campbell's multi-billet job as Commandant 14th Naval District, Commander Hawaiian Sea Frontier, and Commander Naval Base Pearl Harbor until RADM Campbell's relief could arrive from the mainland.

Incidentally, in connection with the above, senior chief photographer's mate Bob Carlisle of the NAS Barber's Point-based Utility Squadron One wasted no time in seizing a once-in-a-lifetime opportunity. He snapped RADM Duerfeldt in seven different poses, and combined nameplates with some trick photo-blending to create a montage of the admiral in a seven-man staff conference with himself.

The photo graced the front page of the Barber's Point *Pointer*, and represented, we think, one of the more clever and imaginative bits of photo-journalism published in a ship or station newspaper in many a tour.

★ ★ ★

The past two months have witnessed the departure from the active Navy scene, through retirement, of two of the Navy's most distinguished senior citizens.

At Naples, Italy, ADM Charles R. "Cat" Brown, the pioneer flier whose 45-year career spans the entire history of U. S. carrier aviation, relinquished his Allied Forces Southern Europe command to ADM James S. Russell, former Vice Chief of Naval Operations. And in Washington, D. C., CDR Charles Brendler, Director of the U.S. Navy Band since 1942, wound up 48 years of naval service when he passed the baton to Assistant Director LT Anthony Mitchell. (see the "Letters to the Editor" section, page 25).

This space is far too small to even attempt to chronicle the tremendous achievements of these two long-time, dedicated Navymen. We will merely note that in an outfit where professional excellence is an accepted way of life, they have been two of the top "old pros."

The Navy these days, we reflect (with no more than a passing twinge), is becoming increasingly a young man's game. It will be fortunate indeed, however, if among the ranks of today's young aviators and musicians are a potential Cat Brown and Maestro Brendler.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Information Bulletin, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau should be kept informed of changes in the number of copies required.

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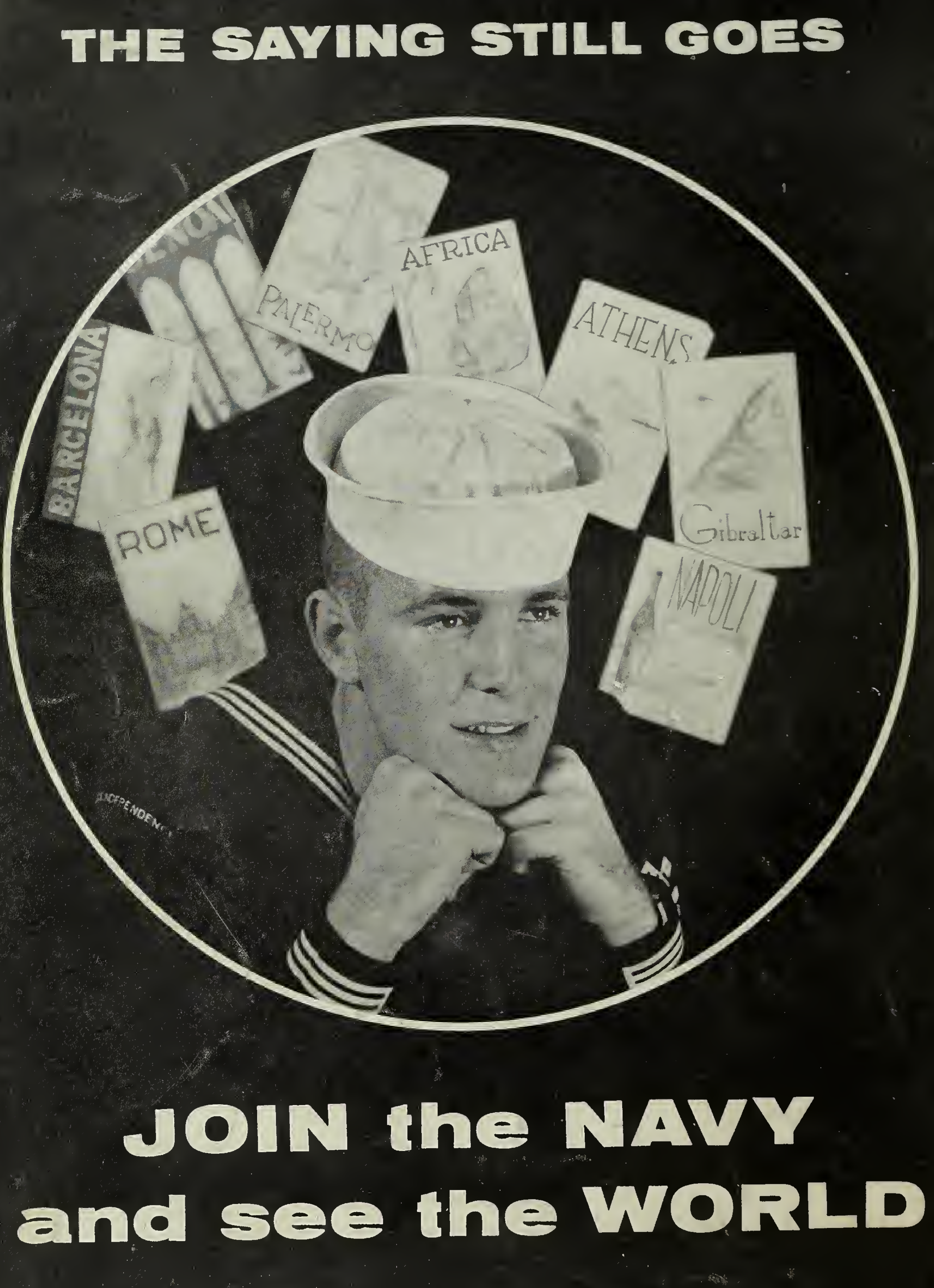
- **AT RIGHT: HIGH THERE — A supersonic F8U-1P Crusader of Photographic Squadron (VFP) 63 makes a pretty picture as it flies high in the sky over Pearl Harbor, Hawaii.** ➡


THE SAYING STILL GOES
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JOIN the NAVY
and see the WORLD

ALL HANDS

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THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel
CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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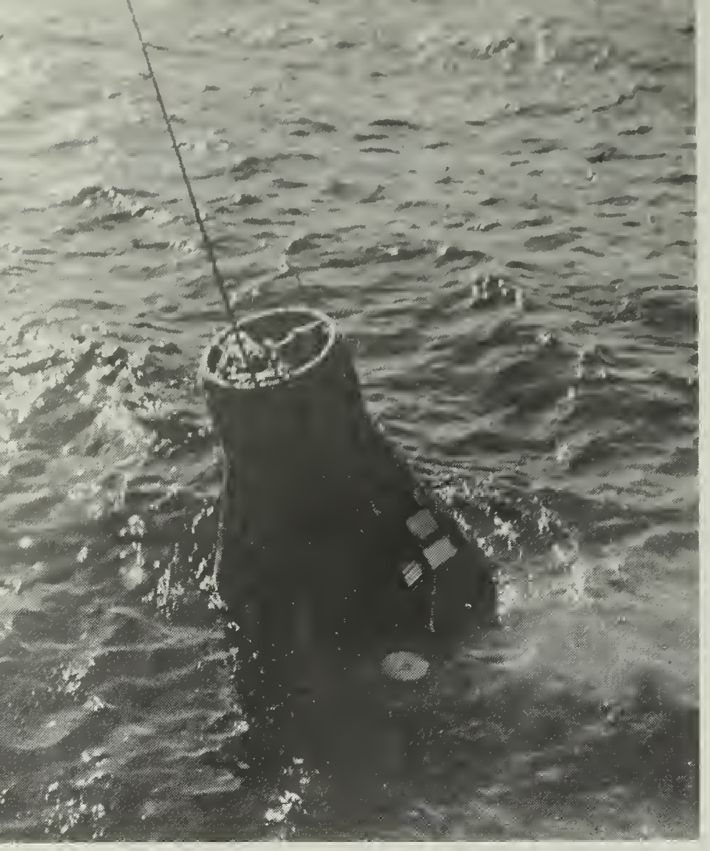
- **FRONT COVER: MANNED AT THE MOMENT — The Navy Oceanographic and Meteorological Automatic Device (NOMAD), an unmanned weather station, is moored in the Gulf of Mexico to keep a watchful eye on approaching turbulent weather.**

- **AT LEFT: TOGETHERNESS — Rear Admiral F. T. Williamson, USN, Commander Cruiser Division Four, speaks to the crew of the guided missile light cruiser *USS Little Rock* (CLG 4) during award ceremonies in Livorno, Italy.**

- **CREDITS: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.**



JOURNEY'S END—Space capsule floats in Atlantic as *USS Noa* moves in and rigs for lifting aboard.

PICKING UP THE SPACE CAPSULE

USS NOA

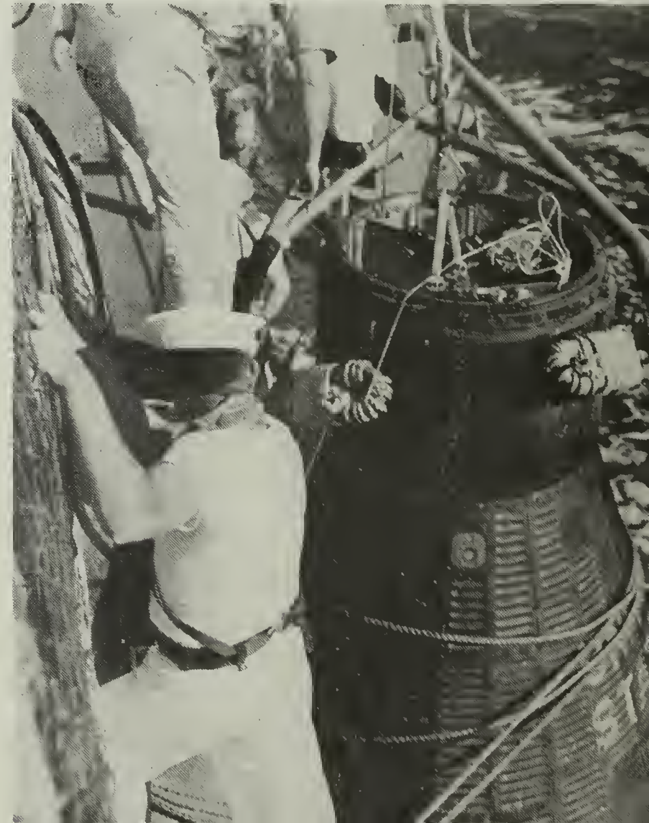
A HUNCH THAT PAID OFF and a space capsule which fell some 40 miles short of its destination after a three-times-around-the-earth, 81,000-mile journey were the prime ingredients which turned the full glare of world-wide publicity upon the Atlantic Fleet destroyer USS *Noa* (DD 841) late last February.

As most of you are aware by now, it was *Noa*, normally attached to DESDIV 142 and homeported at Mayport, Fla., but operating in this instance as a member of a special recovery task force, which plucked the *Friendship Seven* space capsule and astronaut LCOL John Glenn, USMC, out of the Atlantic after their epic three orbits around the earth.

Despite all of the odds against them, *Noa's* crew and her skipper, CDR J. D. Exum, USN, never lost faith in their feeling that they had as good a chance as anyone to recover the Project Mercury spacecraft and astronaut Glenn. They made plenty of advance preparations on the strength of that faith. And then – somebody up there must like *Noa* – she got lucky.

Let's go back a bit and set the scene for you. The story really starts, of course, with the 0947 blast-off 20 February at Cape Canaveral which ended weeks of frustrating delays and postponements, and sent Colonel Glenn rocketing upward on his historic mission. You know all about that though – as does everyone who watched a television set, listened to a radio or read a newspaper that day. This is, rather, the story of the end of the trail, and how lightning suddenly struck

FRIENDSHIP SEVEN was decked without a scratch.



ADDS A HAPPY ENDING

a hitherto practically anonymous Navy destroyer — and turned her into a queen for a day.

Noa was one of three ships assigned to patrol an oval-shaped area some 200 miles long and 50 miles wide. Dead center of this area, some 950 miles southeast of Cape Canaveral, and roughly 225 miles northwest of San Juan, Puerto Rico, was designated as the prime recovery area in the event three orbits were made — and smack dab in the middle of this bull's eye, with the eyes and ears of the world focused upon her as recovery time neared — was the antisubmarine warfare aircraft carrier *Randolph* (CVS 15). *Noa,* meanwhile, maintained a position approximately 50 miles astern of *Randolph,* while the destroyer *Stribling* (DD 867) steamed a similar distance off the carrier's bow.

Other ships waited and watched, too.

If Colonel Glenn had made only two orbits, the recovery job would have fallen to another three-ship force — aircraft carrier *Antietam* (CVS 36) and destroyers *Bailey* (DD 492) and *Turner* (DDR 834), which were positioned in an identically-shaped area about 360 miles southeast of Bermuda.

In a single-orbit situation the capsule would have landed somewhere in a like area 600 miles east of Bermuda, where the attack aircraft carrier *Constellation* (CVA 64), *Norfolk* (DL 1) and *Stormes* (DD 780) were deployed. Beyond and all around these three great recovery areas, the rest of the 24-ship task force, including 60 aircraft, plus many shore-based patrol, search and rescue planes were also on the alert.

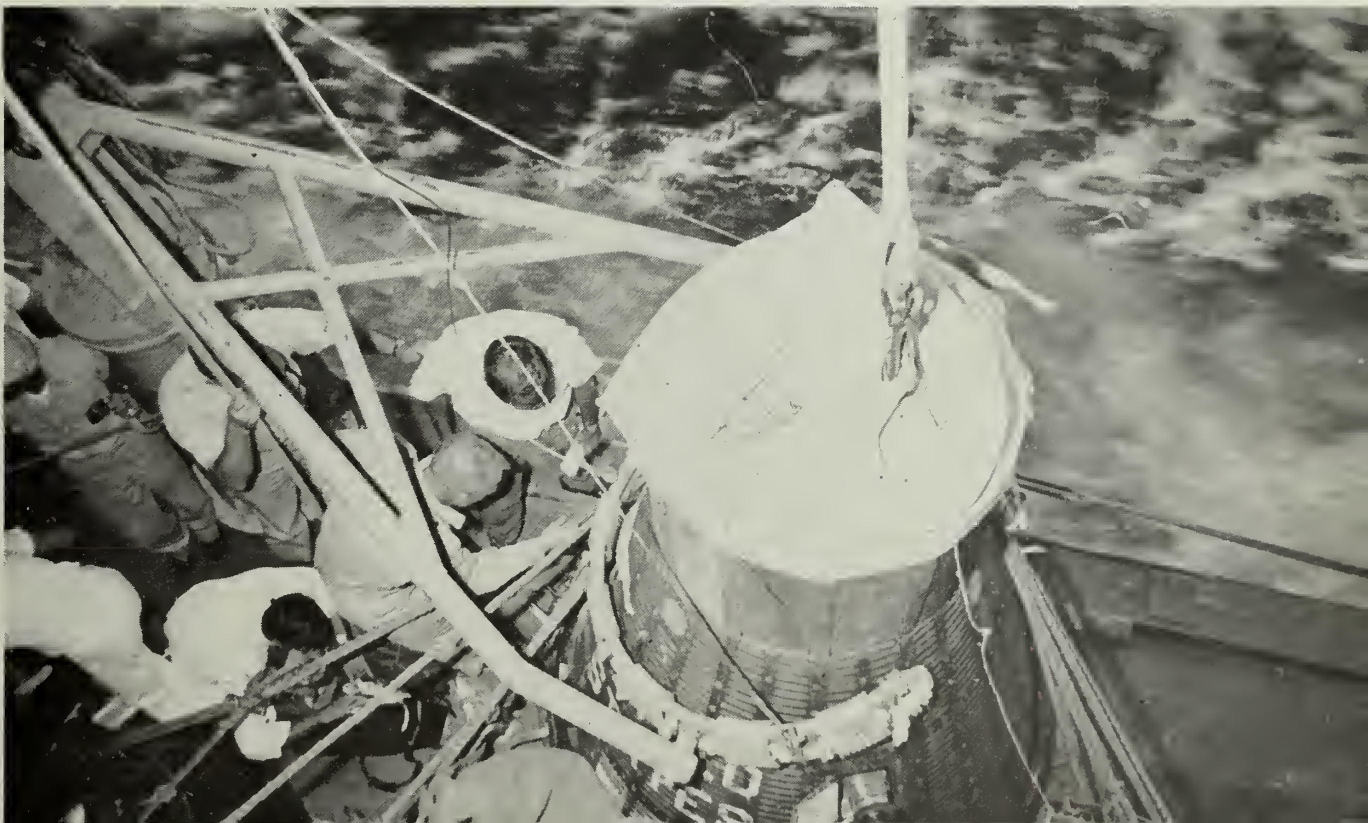
Under the primary recovery plan, with the spacecraft expected to land somewhere near *Randolph,* a Marine Corps helicopter from the carrier would pick up astronaut Glenn from atop the capsule. Then *Noa* or *Stribling,* depending upon which reached the scene first, would hoist the capsule itself aboard.

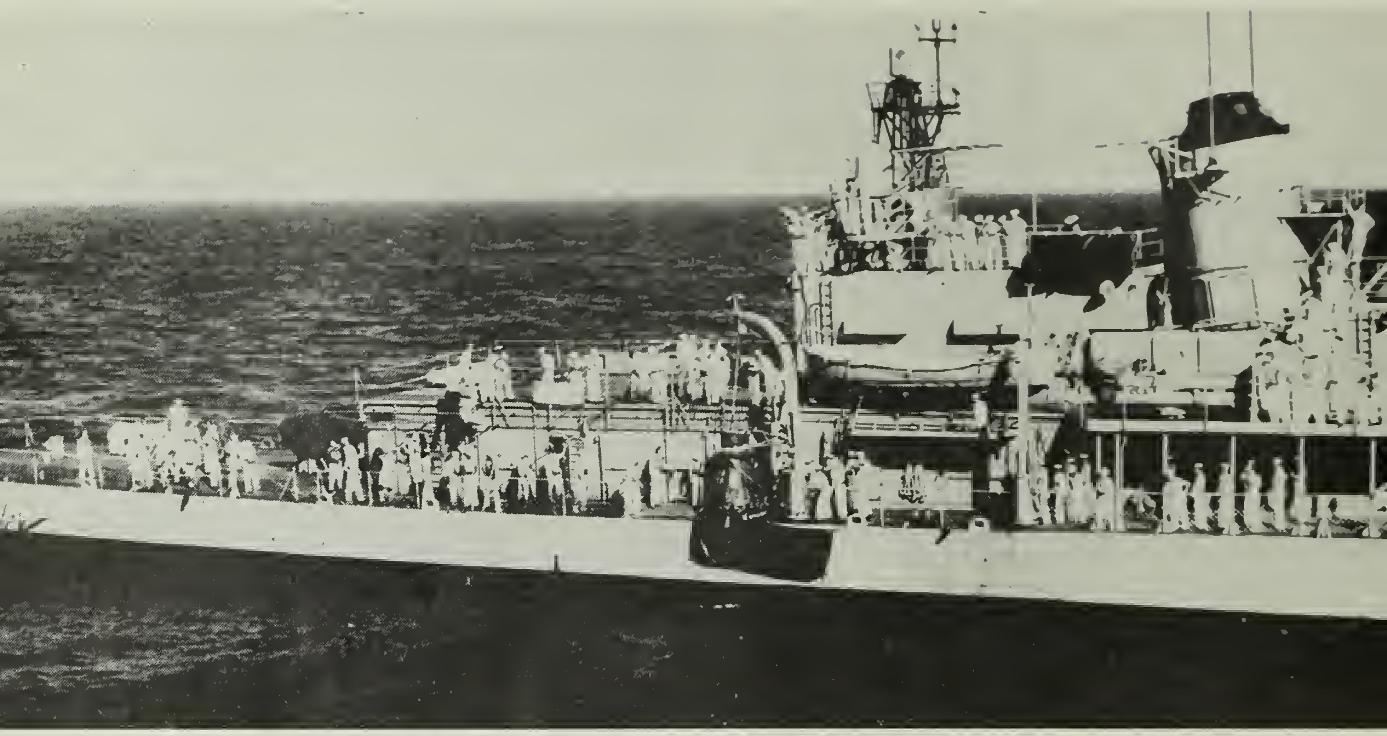
That's the way it was supposed to have been — but it didn't work out that way. And probably the least surprised group of all was *Noa's* crew. This is a crew with a lot of esprit de corps, and a belief in themselves. Since at least a week before the shoot they had been cockily, and vocally, confident that the big prize would fall to them. LT William Hatcher, *Noa's* exec, put that confidence into words: "We feel that the capsule is far more likely to undershoot than overshoot. We are banking on it falling a little short. If it falls as much as 40 to 50 miles short, we stand a good chance of beating those Marine choppers to the punch. The colonel won't want to stay in that capsule any longer than necessary once it hits the water. He'll want to get off on the first thing that comes by."

Want some more evidence that the *Noa*men just knew in their bones they'd be lucky?

Well, like all of the destroyers in the special task force, *Noa* was well-prepared for a capsule pick-up. One of her whaleboat davits had been specially rigged for that purpose. A super-strength braided nylon line had been fashioned, and a big winch set up. *Noa's*

IN SAFE HANDS — Astronaut Glenn and crew members of *USS Noa* check spacecraft for possible damage.





ALL ABOARD—*Friendship Seven* space capsule was placed on deck of *Noa* 21 minutes after landing in sea.

preparations didn't end at this point, however.

First of all, a big blue and white sign, reading "*Noa's* men welcome Glenn" was painted and mounted on deck. Then skipper Exum had a citation drafted up, making Colonel Glenn an honorary member of the ship's company. In addition, Glenn was proclaimed in advance as *Noa's* sailor of the month, and the $15 check which goes with the award was filled in and locked in a safe, all ready for presentation. *Noa* was ready for her day in the sun – if it arrived. And if the *Noa*men had written the script themselves, they could not have made it come out any better

At precisely 1440, five hours and 53 minutes after takeoff, the *Friendship Seven* reentered the earth's atmosphere with a loud sonic boom clearly audible on board *Noa*.

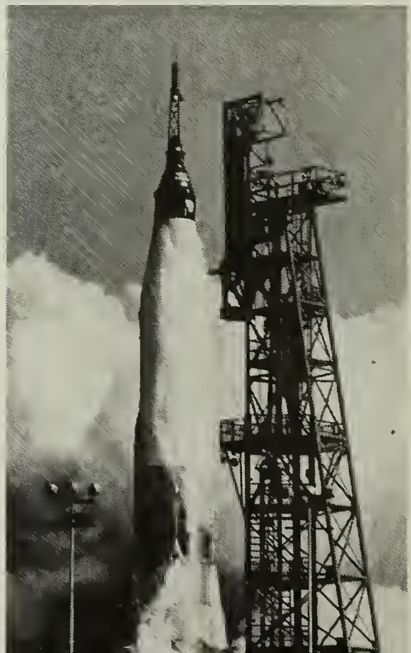
Seconds later the spacecraft, dangling from a huge orange parachute, was spotted by Seaman V. W. Helms, one of a swarm of lookouts posted about *Noa's* deck and superstructure.

Noa was about three miles away from the capsule when the sharp-eyed Helms spotted it. Short seconds later the spacecraft splashed into the ocean, and lay bobbing in gently rolling swells. The three Marine Corps whirlybirds from *Randolph*, already airborne, were racing full-throttle to the scene. The race was on – a race *Noa* won with miles to spare.

Nearing the capsule, skipper Exum guided his ship into an approach from the windward side, which enabled *Noa* to nudge gently up alongside the bobbing spacecraft without damaging it.

The nearest helicopter was still some 15 miles away. On voice radio from *Randolph* came permission for *Noa* to effect the recovery of capsule and astronaut.

OFF WE GO—Astronaut Glenn enters spacecraft at Cape Canaveral, and *(rt.)* NASA capsule begins trip.



A-OK—Astronaut talks over *Noa's* phone while resting. *Rt:* Destroyermen hold up their welcome sign.

A special sea detail under the direction of LTJG James Herr swung into action.

Wielding a shepherd's crook, Boatswain's Mate 3rd Class David Bell and Seaman Ernest Knowles leaned out and snagged the capsule. Then the super-strength nylon line was run through a metal eyelet on the capsule's top and, with the winch hauling away, and with such *Noa*men as ENS Donald Batista, Chief Boatswain's Mate Harold L. Isehower and, Joe Nelson, BM2, playing key roles, the *Friendship Seven* was hoisted easily onto *Noa's* main deck.

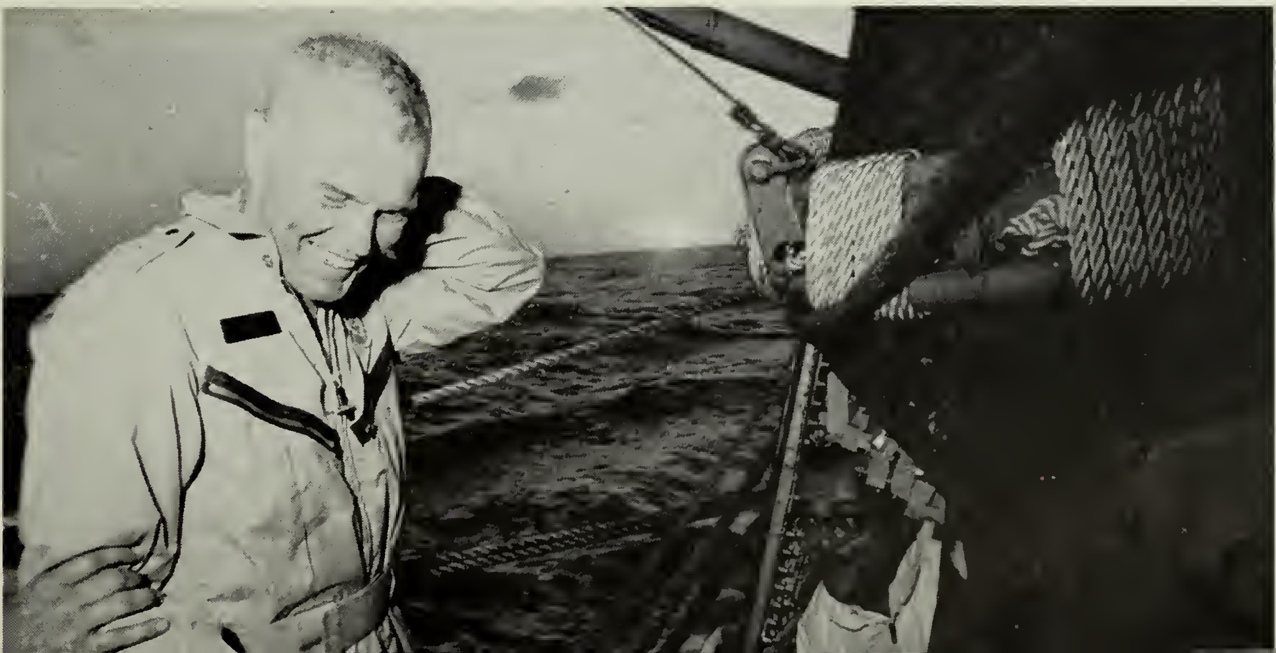
During the three-mile run to the scene, and throughout the entire pickup operation, *Noa* was in constant radio contact with astronaut Glenn inside the capsule, and had repeatedly warned him not to attempt to come out. Now however, safely ensconced on board, Colonel Glenn wasted little time blowing the escape hatch in the capsule's side and clambering out to a tumultuous welcome from *Noa's* crew.

His first words — "It was hot in there" — were hardly historic, but certainly understandable. In short order, America's first astronaut shed his hot and bulky spacesuit; showered; changed into a light blue flight suit and sneakers; requested, and got, a glass of iced tea; and was given a quick preliminary medical check. Then the colonel sat down on a chair on *Noa's* main deck, propped his feet up on a handy hedgehog rig, and, speaking into a tape-recorder, coolly conducted his own self-debriefing session while the details and impressions of his flight were still fresh and vivid in his mind.

Next came the ceremonies.

First the reading of the citation naming LCOL Glenn

ONCE AGAIN—LCOL Glenn saw fourth sunset while *Noa* sailed for rendezvous with *USS Randolph* (CVS 15).



LUCKY LADY—After years of quiet service *USS Noa* (shown in recent photo) made world-wide headlines.

an honorary *Noa* crew member. He promptly won the hearts of all *Noa*men by declaring that "there's not another ship in the U. S. Navy I'd rather be a crew member of."

Next came presentation of the 15-dollar check due him from his selection as *Noa's* sailor of the month—an unprecedented honor for a Marine. Astronaut Glenn quickly became an even more popular Marine (as far as *Noa*men are concerned, when he endorsed the check over to the ship's Welfare and Recreation fund. (They intend to frame the check).

All of this time *Randolph,* carrying some of the most frustrated newsreel and television cameramen and reporters in the history of newsgathering, was speeding toward *Noa* at a flank-speed 30-plus knots. For a while there was talk of a highline transfer of the astronaut between *Noa* and *Randolph* when the two ships rendezvoused, but this idea was quickly scuttled in favor of a less risky and less elaborate helicopter pick-up. At about 1730, a *Randolph* chopper hovered over *Noa's* deck, a sling was lowered, and Colonel Glenn was lifted up and in.

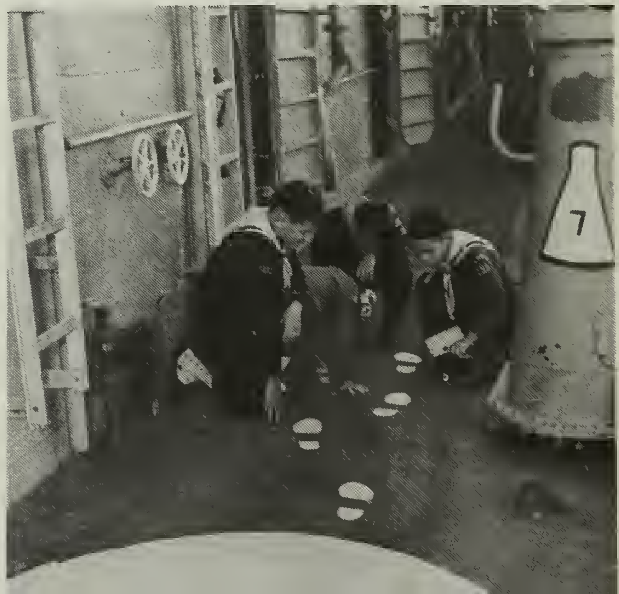
The near-three-hour tour of sea duty aboard *Noa* was over for astronaut Glenn. Ahead, for him, lay a couple of more hours of medical exams and further debriefing sessions aboard *Randolph,* more of the same at Grand Turk Island in the Bahamas, then a return to the U. S. for one of the wildest welcomes ever accorded any American.

Ahead for *Noa* lay a return to Mayport, and a resumption of her more prosaic everyday antisubmarine warfare training duties. For a few short hours, though, she and her crew had basked in the glory of a central role in one of America's first great thrusts into space. February 20, 1962 had become a date no *Noa*men—and precious few other Americans, for that matter—would ever forget.

★ ★ ★

When fate intervened to dump the *Friendship Seven* capsule and astronaut John Glenn practically into its

SPECIAL CAKE of *USS Antietam* was made with high hopes. *Rt:* Scouts look at spaceman's footprints on *Noa.*



lap last February, *Noa* suddenly found herself cast in the role of a celebrity. It was a new and unaccustomed role for a veteran destroyer which has racked up a 17-year Navy service record of loyal, efficient, but largely unsung, performance of duty.

Commissioned 2 Nov 1945 in Boston, Mass., and named for Midshipman Loveman Noa who was killed by insurgents while scouting for smugglers of war contraband on the island of Samar in the Philippines in 1901, *Noa* has spent most of her time since on a variety of training and antisubmarine warfare assignments.

Her history closely parallels that of many another Atlantic Fleet ship commissioned too late to see service in World War II. For those, like *Noa,* which did not participate in the Korean conflict, the years 1945 to 1962 have been a period of routine, unexciting peacetime service — important service for the peace and security of the U. S., to be sure, but mostly unrecognized outside of the Navy itself.

In a way then, even though millions of eager televiewers lost the chance to watch the recovery operation first-hand, it was no more than long-delayed poetic justice smiling upon *Noa.* And the performance of destroyer *Noa* under pressure illustrates a point the Navy likes to emphasize.

It's probably considered cornball these days — but it's still literally true — that "they also serve who only stand and wait." Suppose, for example, that the capsule had splashed down just a couple of miles away from *Randolph* as it was supposed to have done.

In that case, one of the *Randolph* 'copters would have plucked Glenn off the capsule and whisked him straight away to the carrier. The actual recovery of the capsule itself later on, by either *Noa* or *Stribling*, would have drawn but scant attention. (And how about *Turner, Bailey, Norfolk, Stormes* and the others? They were out there too, ready, willing and able.) The point we're anxious to make, however, is that — supposedly routine mission or no — when her chance came, *Noa* reacted like the highly trained ship she is.

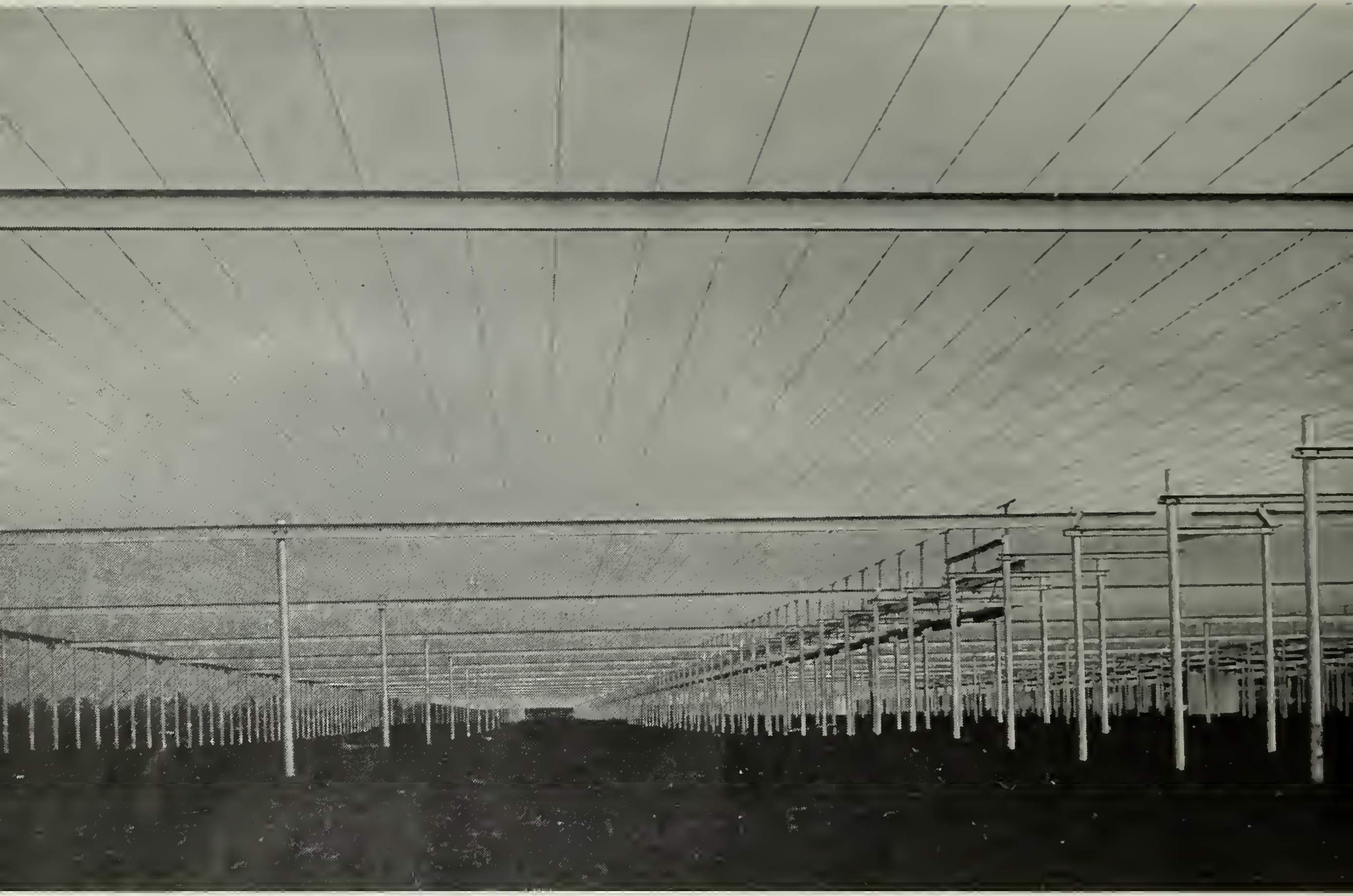
Every action of ship and crew that day emphasizes this fact. The seamanship involved, in putting *Noa* alongside and in contact with the floating spacecraft without so much as scratching any paint, was of the highest order. The swift and efficient manner in which the capsule was brought aboard revealed disciplined, well-drilled teamwork in the best Navy tradition.

NOW HEAR THIS—LCOL Glenn recounts his space flight on tape recorder while on board ship.

It was a time when it was important for the Navy to be better than good — and all of us, as Navymen, can take pride in the performance of *Noa* and the sailors who man her.

— Jerry McConnell, JO1, USN.

TRANSFER POINT—Crew members and press on board *Randolph* wait for astronaut's arrival from *Noa.*



SPACE 'EYES' — Ground view shows array of Space Surveillance Receiver antennas at Alabama station.

SPASUR Keeps Watch o

BIG BROTHER may try to cast an occasional, satellite-borne beady eye on us from space these days — but thanks to a U. S. Navy-developed and operated electronic fence called SPASUR, he can't get away with such sneaky capers undetected.

SPASUR — officially the Naval Space Surveillance System — was developed in 1958 by the Naval Research Laboratory to detect and identify invasions of North America's space frontiers by "dark," or radio-silent, space objects.

In essence an electronic screen thrown up across the southern belt of the United States from San Diego, Calif., to Ft. Stewart, Ga., SPASUR is composed of three sub-systems.

The first is a *radal* (radio detection and location) transmitting and receiving network, and the second is an information sorting center equipped with a high-speed digital computer. The third, known as SPASCORE, maps the present, past or future paths of known satellites in orbit. The latter two sub-systems are both located at the Naval Weapons Laboratory, Dahlgren, Va.

In developing the SPASUR system, Naval Research Lab scientists were faced with the problem of overcoming a satellite's great height and velocity, and its small size. They found, for example, that pulse radar,

TEAM MEMBER—Surveillance Station at Jordon Lake, Ala., is one of the links in spacewatching network.

SPASUR keeps watch in the sky.

ONE JOB of SPASUR program was to detect radio-silent space objects.

Space

so efficient at tracking highly maneuverable, but slower, ships and aircraft, didn't fill the bill in satellite detection. They found, moreover, that an orbiting object's great speed gives observers only a few seconds to locate it, but that at the same time, such high velocity provides the object great trajectory stability.

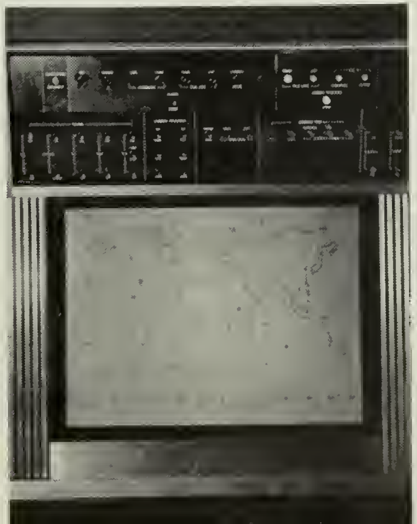
For its answer, NRL turned to the system of receiving stations known as Minitrack, originally initiated for use in Project Vanguard. One of the calibration devices employed in Minitrack was a moon-reflecting system consisting of a 50-kw FM transmitter installed to operate into a 50-foot dish at the Signal Corps Engineering Laboratories, Fort Monmouth, N. J.

In June 1958, when NRL got the go-ahead from the Department of Defense to provide one tracking complex in the eastern portion of the U. S., and another in the western section of the country, it dismantled the Fort Monmouth transmitter, and reinstalled it at Jordan Lake, Ala.

At the same time, a receiving station was put into operation at Fort Stewart, Ga., and by late July 1958 – less than six weeks after the DOD directive – SPASUR was underway. By November of that year the Silver Lake, Miss., receiver was operational, and the eastern complex was complete.

A few months later the western complex – transmitter at Gila River, Ariz., and receivers at San Diego, Calif., and Elephant Butte, N. Mex., commenced operations. Just the past summer, a 560,000-watt transmitter was installed near Archer City, Tex., plugging the gap between the two complexes.

SPASCORE machine indicates the satellite orbits as a succession of dots on a map of the world.



Briefly, here's how the SPASUR system works.

The three transmitters create the detection zone by emitting a continuous, wedge-shaped wave of radio energy into space from coast to coast. When any orbiting object enters the detection zone, part of that energy is reflected to two or more of the four receiving stations. Those receivers transmit measurement signals (reflected to them from the orbiting object) to the operations center at Dahlgren. There, by speed measurement and simple triangulation, the object is precisely located in space.

The SPASUR people at Dahlgren operate on the principle that a detection rate of the highest accuracy

MOON BEAMS—Dish antenna was part of moon reflecting system at Fort Monmouth, N. J. Transmitter is with SPASUR at Jordon Lake, Ala.

is a prerequisite to existence, and they're not about to be satisfied with anything less.

To do that kind of job, the Dahlgren space sleuths rely on their ability to maintain current orbit computations and predictions on every object in orbit around the earth. Thus far, for example, they have successfully identified, and predicted the paths of, orbiting objects ranging in size from a strand of 1/16-inch wire approximately 14 feet long to huge Soviet satellites weighing several tons.

Such reliability in identification, they say, makes any newly-launched satellite stand out among predicted observations like a heavy line on a clean sheet of paper. And they're extremely proud of the fact that, to date, no Russian satellite has crossed over the U. S. without being properly identified within a matter of minutes.

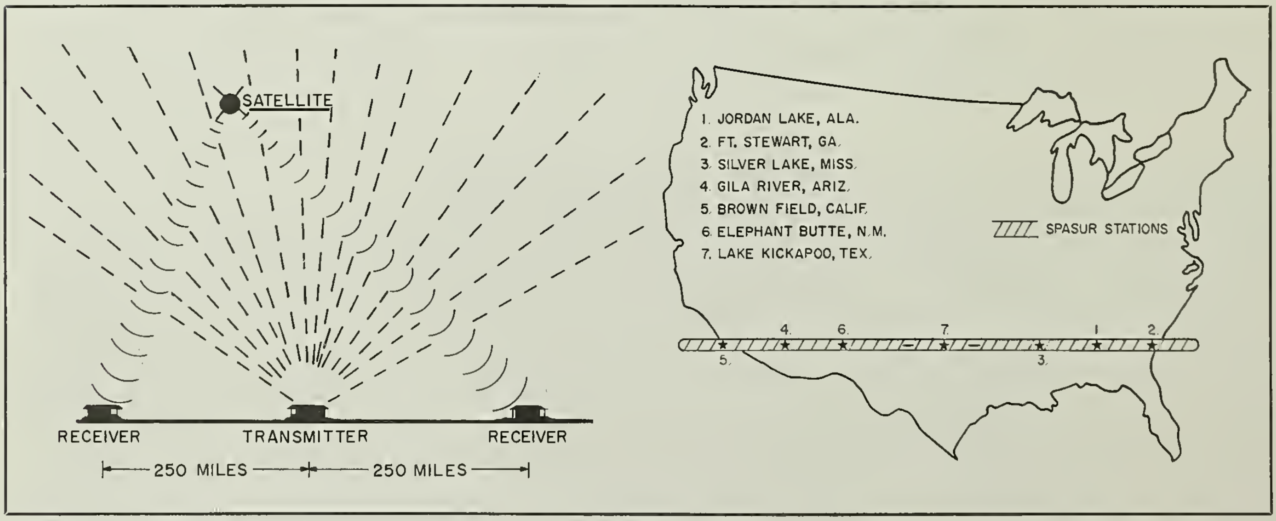
Heart of the Dahlgren operation is a high-precision, high-speed NORC (Naval Ordnance Research Computer) which can process all observations with minimum delay. At present, data from the receiving stations is read visually, interpreted and inserted into the computer for orbit determination and predictions. Automation is coming to Dahlgren, however, and it is expected that within a short time data will be transmitted directly into the computer without ever having been handled by a human being.

Pinpointing of orbiting objects is not a one-pass affair with SPASUR. As the satellite repeatedly passes through the fence in successive revolutions, the Dahlgren computer keeps accumulating observations and continually refining the orbital elements stored in its memory unit. Thus, it can not only tell you where that orbiting object has been in the past, and where it is at present, but also where it's going to be.

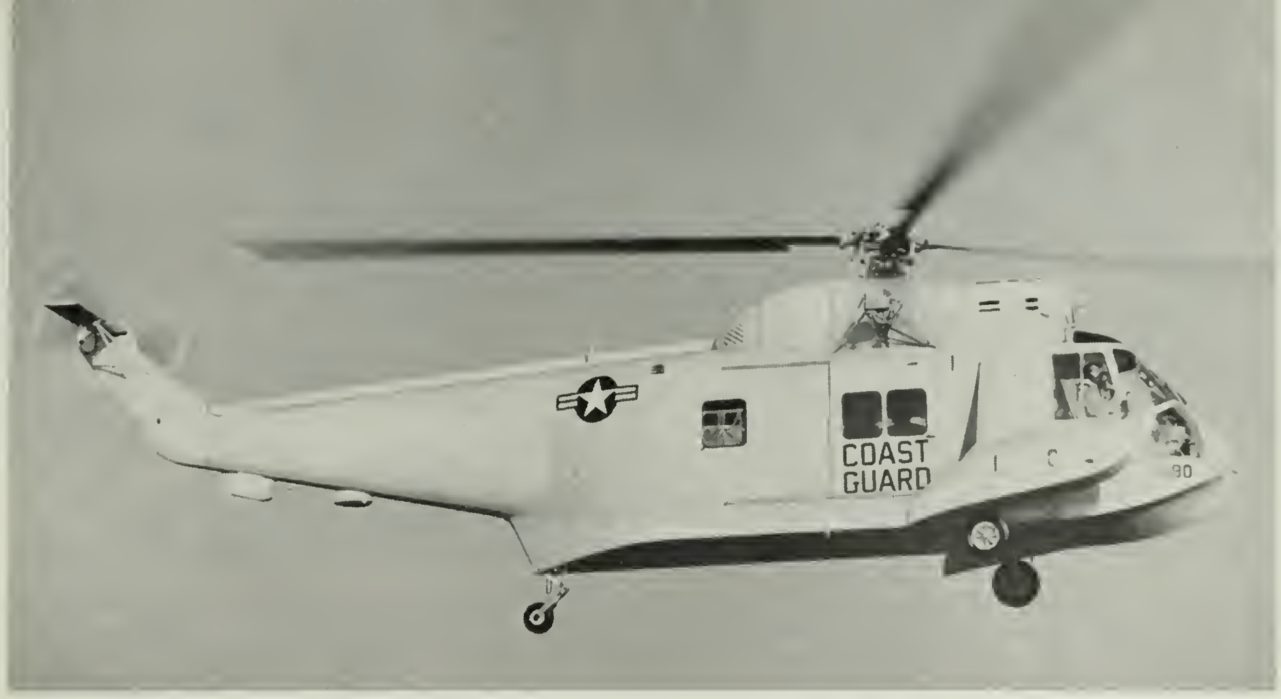
Who are some of SPASUR's interested customers? The U. S. Navy, for one. Orbital evaluations and predictions are flashed to both Atlantic and Pacific Fleet headquarters around the clock.

NORAD (North American Air Defense Command) is another. SPASUR was placed under the operational control of NORAD in late 1960, although the responsibility for additional research and development remains under the direction of NRL, and the system is manned by naval personnel. Complete information on each new sighting is also transmitted to NORAD's Combat Operations Center at Colorado Springs, Colo.

—Jerry McConnell, JO1, USN.



HERE'S HOW—Diagram shows how a Navy SPASUR station operates and (*rt.*) the location of stations.



ON GUARD—New Coast Guard copter makes demonstration flight and moves in for test rescue operations.

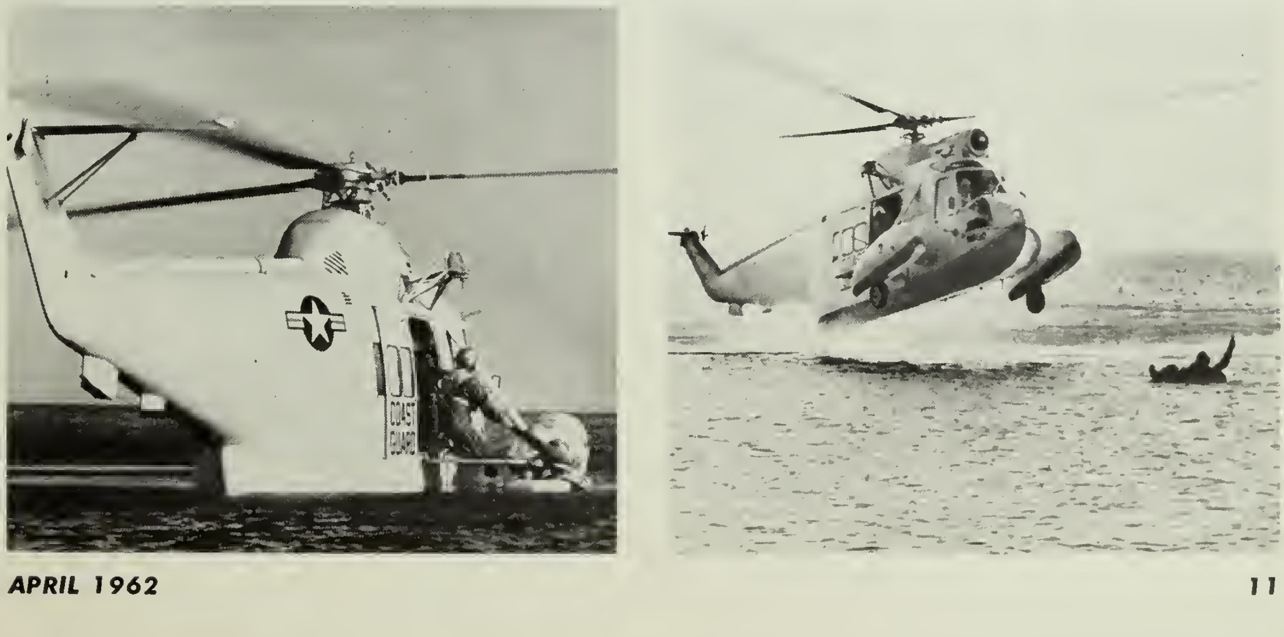
Turbine Whirly-Boat

Something new is being added to the U. S. Coast Guard search and rescue team. It is a turbine-powered, boat-hulled helicopter that will be known as the HUS2S-1G.

The single rotor aircraft has a cruising speed of 90 to 95 knots and a carrying capacity of 2900 pounds. This copter is able to fly approximately 190 miles, pick up an injured person with rescue hoist or by landing on the water and return to its home base with a ten per cent safety margin of fuel remaining in its tanks.

The amphibious hull of the new whirlybird, coupled with a new rescue platform, is expected to make changes in present rescue techniques and provide an increase in the flexibility of helicopter operations over water. Automatic stabilization gear will bring an improvement in instrument flight operations. The Coast Guard has been evaluating the HUS2S for the last year.

WATER BIRD—Amphibious whirlbird lands on the water. Platform helps in bringing man aboard from raft.



Navy's Blue Books

Sometime this year, you may be one of 600,000 Navymen who will get the urge to curl up with a good book. If you are a Navyman who wants to get ahead, that good book will be bound in blue (or green, if you work around airplanes) and it will come complete with an assignment booklet.

If you're in a ship, you'll probably have to ignore the rock and roll record in the mess hall and, if you're at home, you'll have to pretend the cowboys galloping around on the TV screen really aren't there. Instead, you will concentrate on the extra stripe on your sleeve and the extra money jingling in your pocket which, you fondly hope, will be yours the next time you take an advancement in rating exam.

If you really want to be orderly about how you get ahead, the first thing you will do when you pick up your training course is turn to the appendix which quotes the *Quals Manual* on your rating. Here is where you are told exactly what you have to know in order to get ahead.

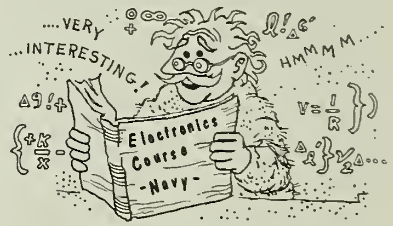
Now that you know what to study, you can get to work. The booklet you are reading is a mirror that reflects the Navy. You don't have to be a mossback to remember the time when blue books were pocket size editions. As the Navy became more complex, the books got fatter. The newer ones are slim again, but tall.

New developments in equipment and weapons call for new ratings — for which qualifications are written. New quals call for new blue books. The Chief of Naval Personnel orders them written and the machinery which turns them out begins to grind.

The men who write the manuals got their jobs because they know the Navy and Navymen. They are chief petty officers and civilians who have had considerable experience, both ashore and at sea, and have a knack of putting the student in situations which will likely occur in the job for which he is studying.

These writers are, beyond a doubt, pretty smart cookies, but they usually don't know all there is to know about every rating. In order to supplement their knowledge, they have recourse to other texts and technical books. They draw upon information from manufacturers' instructions, if they are writing about machinery or other equipment. Most of all, however, they draw upon the knowledge of the technical bureaus in and around Washington where they can find men who know just about everything there is to know in their particular field, whether it be electronics, communications, damage control, construction or any of the various subjects about which training courses are written.

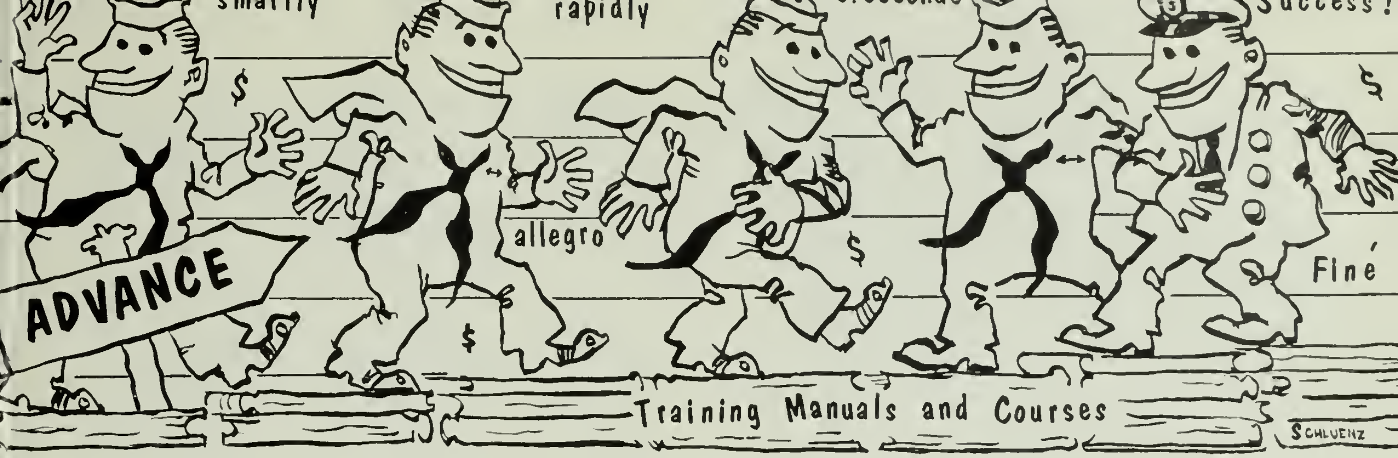
When a technical bureau is asked for information on any given subject, it is expected to come up not only with current information but also with any changes contemplated during the next two or three years.


....VERY
...INTERESTING!
HMMMM...
Electronics Course -Navy-

This brings us to another point. What do the writers do in between new quals and new ratings? They manage to keep pretty busy. Training courses are reviewed constantly and, with the exception of basic subjects, are revised about every three years. Aside from actually writing them, keeping them up to date is one of the bigger problems.

A continuing battle is fought to keep the manuals from growing whiskers before they even get to the Fleet. For instance, printing once took from 10 to 11 months. Printing methods have been replaced with new processes which take only three to four months.

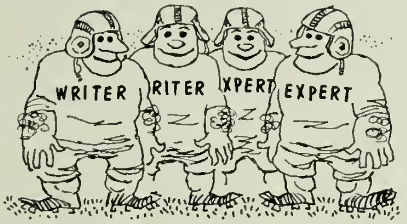
There is a new look in distribution, too. Instead of ordering training courses from central distribution stations ashore, manuals are now distributed to ships and shore stations on a basis of strength. This is done automatically in order to get



the word, at the earliest possible date, to the men who need it.

So now you know how writers, technical bureaus *et al* have combined forces to give you the latest scoop to pass your advancement in rating examination. The training courses are in the hands of the users, but that usually isn't the end of it.

In spite of the best efforts of writers and technical bureaus, the Bureau almost invariably receives comments (some other than favorable) and suggestions for additions from the users of the textbooks.



Such comments are not only welcome, they are encouraged. Nothing, the writers say, with perhaps a hint of a weary smile, compares with the reactions of the users of a text for improving its effectiveness.

WHEN THE WRITER of a training course finishes a chapter for the manual, he passes it to his counterpart in the correspondence course shop. Most correspondence courses are written at the Navy Training Publications Center, Washington, D. C., or, if on an aviation subject, at Memphis, Tenn.

The courses came into being at the end of World War II when returning vets joined the Naval Reserve in large numbers. Many of them lived too far from Naval Reserve training centers to attend drills regularly, so the Navy had a problem on its hands — how to keep these men informed concerning developments in their ratings and on advances in the Navy. Home study courses seemed to be a natural answer.

Navy training experts, working with educators at the University of Chicago, launched a correspondence course research project. The results of their first two years of work were courses on more than 100 titles.

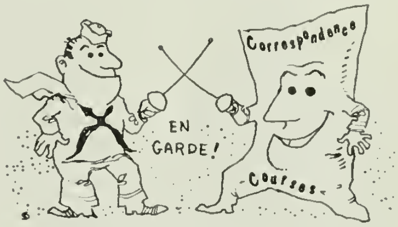
The courses were so successful that a new problem was created. Not only did Reservists enroll, but men in the Fleet, seeing a good way to prepare for their advancement-in-rating examinations, began to enroll by the thousands.

It wasn't long before the Navy found itself operating the largest correspondence school in the country. Administration of student enrollments, grading and record keeping were shifted to the Naval Station at Scotia, N. Y. (and in the case of most students on active duty to local command). Since then, life at the Correspondence Course Center has been a scramble to get the answer sheets marked. It will soon have to resort to machines.

CORRESPONDENCE COURSES, like the training courses, are put together by men in the know. The purpose of correspondence courses is not to separate the sheep from the goats or to test for the record what a man knows. The course writers leave this kind of testing to the administrators of the advancement examinations.

A correspondence course has one primary function — to help direct the Navyman's study of the training course. The course writers are so anxious to get this idea across that they carefully avoid the word "test." They don't even use questions. Instead they use items.

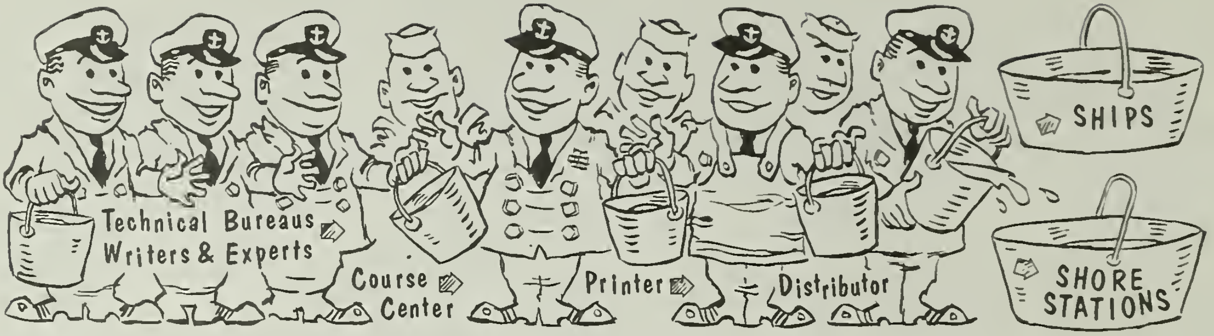
Like the writers of the training courses, the men who write correspondence courses are chiefs and civilians who know whereof they speak. Like their counterparts in the training manual shop, they are hand-picked for their jobs because of their wide knowledge of the U. S. Navy and their experience.



A man studying by mail, the course writers feel, is a pretty lonely individual. They want to give him as much help as they can. If he has trouble with the course, he should get help from the officer who administers it on board his ship or station. If, for some reason or other, he can't get help from this source, he should write to the Correspondence Course Center at Scotia, N. Y.

The chances are better than average that, somewhere along the line, the student will need at least a little assistance, because correspondence courses are intended to present a challenge to the student. If they didn't they would be missing their point.

USUALLY, STUDENTS take the courses in stride — but not always. The people at Scotia recall a letter from an officer who, after he finished a



course in electronics, thought it much too difficult, in spite of the fact that he had worked in electronics prior to entering the Navy.

A letter from an enlisted man, an electronics technician, who took the same course, acknowledged it was difficult, but justifiably so, in order to prepare the user of the course for the job he wanted to do.

Faulty questions, oops, items, occasionally get into printed courses but, if there are repeated misses, the items are soon revised or deleted.

Also, if a man doesn't know why Scotia's answer is any righter than his, and can't find out locally, Scotia invites him to write and ask.

When the correspondence course writer gets a finished chapter of a training course, he begins to formulate items to guide the student's study.

The correspondence course is put together chapter by chapter until the training course is finished and sent to the printer. This presents a problem for the men writing the correspondence course because it serves notice that their working time on that course is about at an end.

Under the present distribution system, new correspondence courses are distributed to commanders for their active-duty personnel, using the same distribution system under which the manuals reach the men who are serving in the Fleet.

The correspondence course writers now have to take chapters as they come from the manual writers before the chapter has been reviewed by the experts. Items have to be formulated in time to have the correspondence courses ready when the manuals are distributed.

This sometimes gets the writers into trouble. Material in the training course may be changed after the writers huddle with the experts on the subject in the various bureaus around Washington. When this happens, the only way to remedy the situation is to issue a change to the correspondence course.

THE BOOKS and the correspondence courses get to the Fleet. Who uses them? Not too long ago, the Chief of Naval Personnel decided that officers had enough to do aboard ship without requiring them to finish correspondence courses, although it was pointed out that a record of completed courses in an officer's jacket is certainly no impediment to favorable consideration by a selection board.

An enlisted man who takes a correspondence course bids fair to be a success when he takes an advancement in rating examination — 95 per cent of all Navymen who go up for advancement have prepared for the exam in this way.

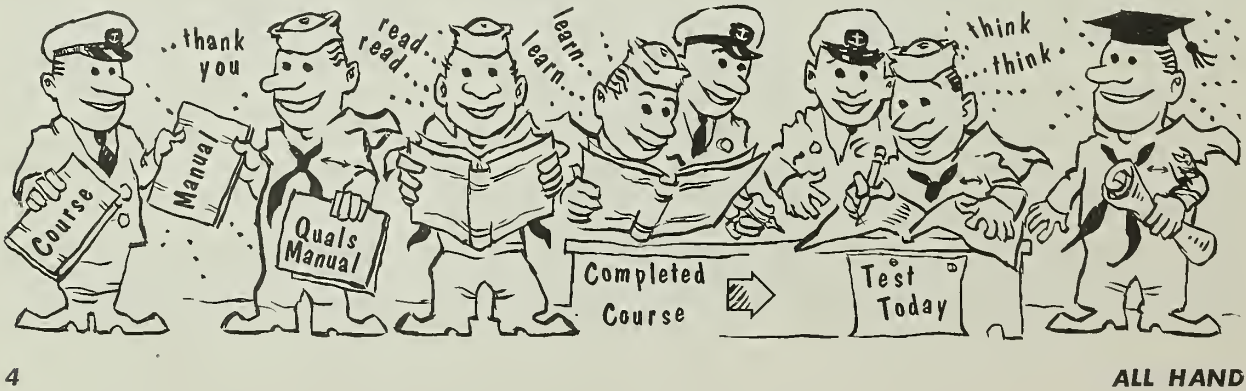
Any enlisted man who aspires to be an LDO or a student at OCS would also do well to get his commanding officer's recommendation and take officer correspondence courses on such subjects as Naval Justice, Navy Regs, Navigation and Electronics.

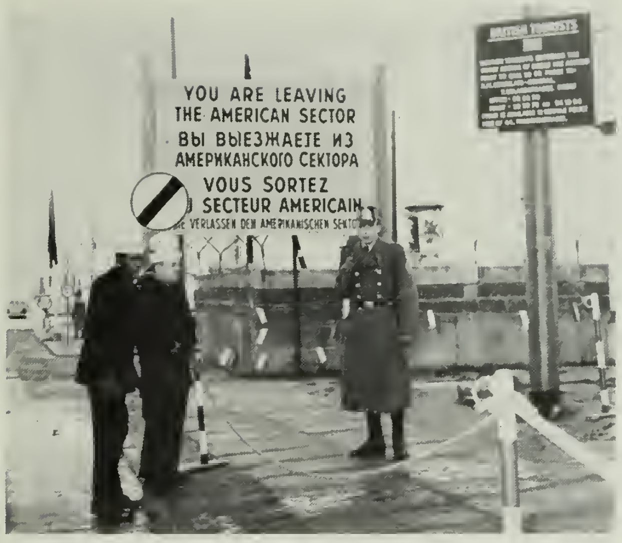
In the commercial world, a completion rate of 18 to 20 per cent of all correspondence courses checked out would be considered phenomenal. The completion rate in the Navy is between 60 and 70 per cent.

Not so many years ago, recruiting posters urged prospective Navymen to join the Navy and see the world or to join the Navy and learn a trade. The trade was presumably a skill which could be used in civilian life after they got out of the Navy.

In today's Navy, the reenlistment rate is substantially more than 40 per cent. It is a career Navy which needs men who can keep abreast of their careers. The Navy has provided the *Quals Manual* to tell the Navyman what he is expected to know as he advances in his rating. This information is quoted for his convenience in the training course booklet which gives him the information to meet the qualifications. The Navy has also provided a correspondence course to guide his study.

They're all there for your convenience and use. Take advantage of them. — Robert Neil.





Seeing Berlin

NOT LONG AGO some 170 Naval Reservists on active duty as a result of the Berlin crisis got a firsthand look at the situation.

During their visit to the city they had breakfast with the District Mayors of Neukoeln, Steglitz and Zehlendorf and were welcomed by Major General Albert Watson, II, U. S. Commander in Berlin. At lunch they were guests of men of the Sixth Infantry of the U. S. Army's Berlin Brigade. The Naval Reservists toured West and East Berlin and visited with Army units before heading back to their ships, which were also activated because of the Berlin situation.

Clockwise from Upper Left: (1) Touring Reservists reach the end of the American sector on Berlin visit. (2) Unusual sight of Navymen in Berlin attracts the attention of youngsters as whitehats walk next to the dividing wall. (3) Destroyerman from USS *Remey* (DD 688) talks to a West German policeman near Brandenburg Gate. (4) Navymen visit Army tankers near Checkpoint Charlie. (5) Souvenir photo is snapped of East German resident during firsthand look at life behind the Berlin wall.

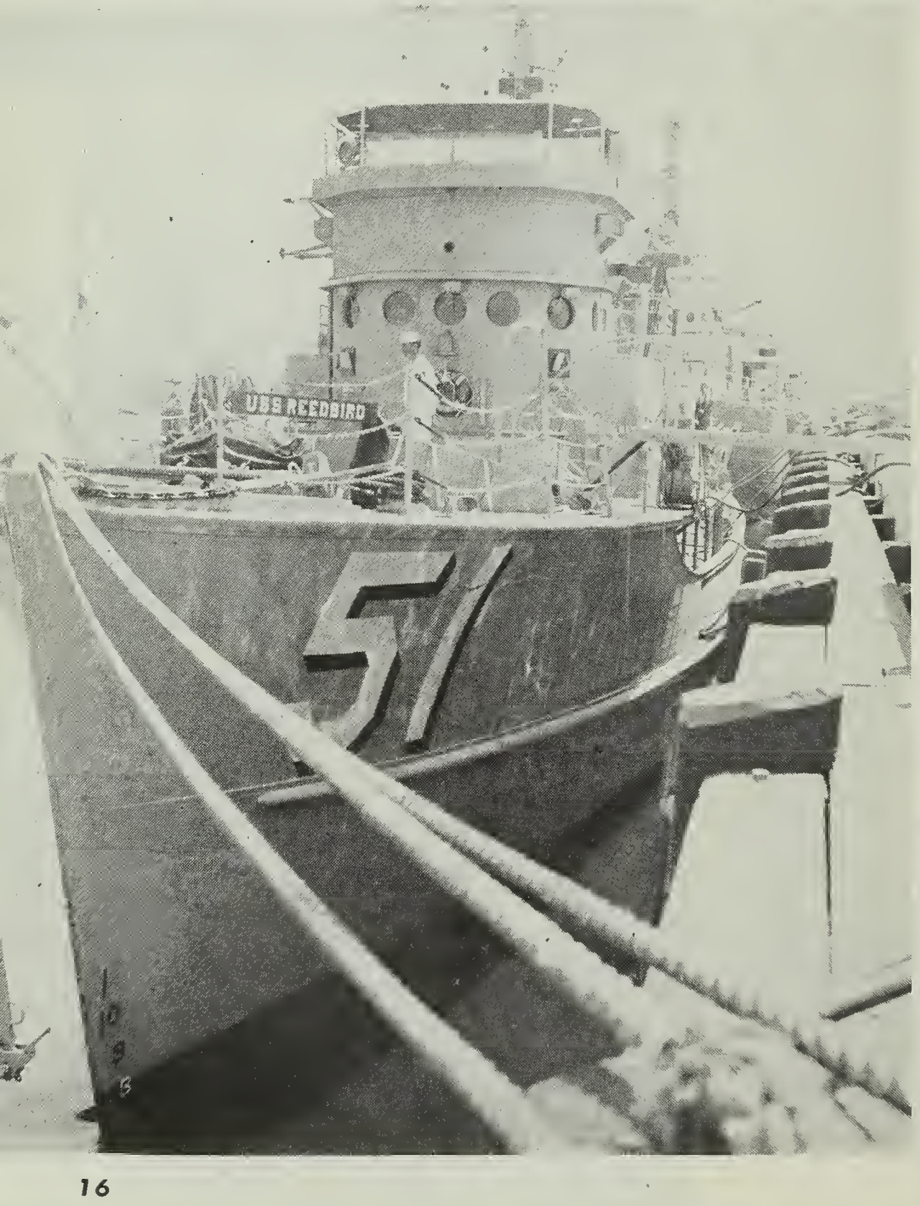
Blue and Gold Crews in

YOU'VE BEEN HEARING about ships with two crews for quite a while. There are the *Polaris*-equipped submarines, for example. There are also Selected Reserve training ships manned by a nucleus crew of full-time Navymen with a Reserve crew of part-time sailors to bring the ship up to full complement. (Forty of these ships — DDs and DEs with their Reserve crews — were ordered to active duty with the Fleet in the recent call-up of Reservists and ships.)

Now we have ships with — count 'em — *three* crews, in the Mine Warfare Component of the Selected Reserve. One is the active-duty nucleus crew, the others are Reserve crews.

Appropriately enough, these Reserve crews—like the *Polaris* crews—are named "Blue" and "Gold," respectively. In the event of mobilization, members of the Blue crew — with orders already in their pockets —would report to their minesweepers for active duty with the Fleet. The Gold crew would be assigned to another ship — possibly one taken out of mothballs — or used to fill out the complements of other ships. Gold crew members carry orders to an active Fleet augmentation billet, specifying duty in mine warfare. Personnel allowances for both crews are the same.

BETWEEN SHIFTS—USS *Reedbird* (MSCO 51) rests between training.



How does this double-crew training technique work? A case in point would be USS *Reedbird* (MSCO 51). *Reedbird* is a 144-foot coastal minesweeper assigned to train Naval Reservists attached to the San Pedro, Calif., Naval Reserve Training Center.

In the past, *Reedbird* went to sea one week end a month, to train her Reserve crew in mine warfare operations. Some Reserve crew members, voluntarily on their own time, spent other week ends in pier-side training. With the establishment of a second — Gold — Reserve crew, operations at sea are stepped up to two week ends a month.

The second Reserve crew provides "seagoing billets" for additional Reservists qualified for mine warfare duty; it is available for assignment to additional Reserve minesweepers as they are activated.

Week-end training on board the minesweeper starts on Friday night or Saturday morning, with the civilian-sailors taking the ship to sea. Their training covers a multitude of minesweeping operations.

Every Friday when the ship is not at sea, her crewmen may voluntarily spend two or more hours on board, taking part in lectures and studying to keep themselves abreast of the latest in mine warfare technique.

USS *DELONG* aids in sub hunt.

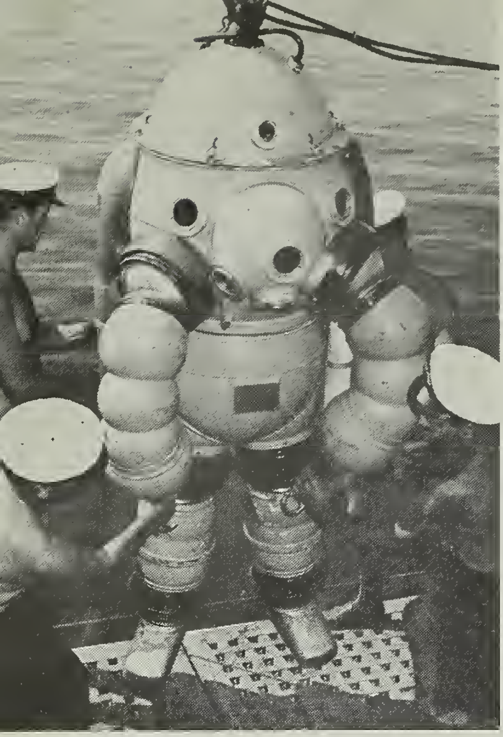
Reserve

Paul Seay, BM1, petty officer in charge of the eight-man active duty crew on board *Reedbird,* sums up the program rather effectively: "If need be, we can get underway immediately," Seay says. "This means another minesweeper added to the Pacific Mine Force that otherwise we wouldn't have and still another trained crew to take over another minesweeper or support the present units of the Pacific Mine Force where needed."

The ASW component of the Selected Reserve has been using a variation on the Blue and Gold crew theme to provide additional training for Reservists in ASW. A "Fourth Section" was organized for many of the ASW Reserve crews. This Fourth Section was not established as a second Reserve crew, however, but as a supporting unit. Fourth Sections have the function of recruiting and training enlisted personnel of the ASW Reserve crew and the supporting Fourth Section. Although members train with the ASW component, they are part of the Reserve's Active Fleet Augmentation Component. In the recent call up of Reservists, Fourth Section members helped out the complements of DDs and DEs.

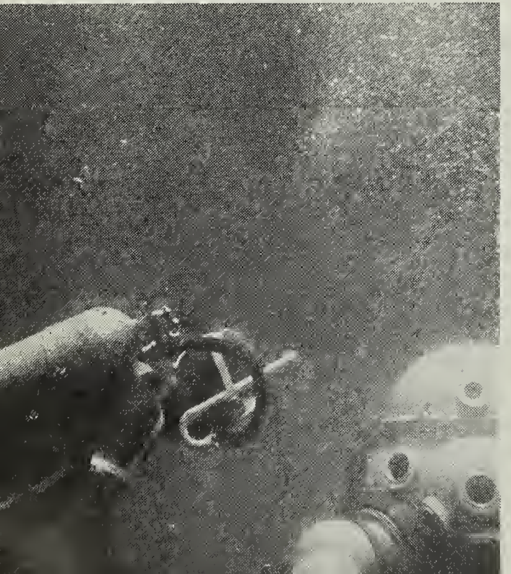
Both programs are helping the Naval Reserve fulfill its mission—that of providing the Navy with trained and ready personnel in the event of an emergency.

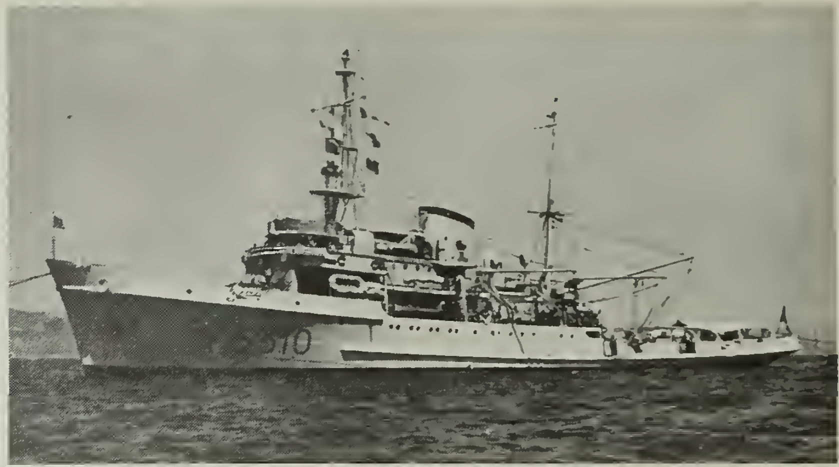
GOLD crewman reports to Gold and Blue COs. *Below:* Reserve ship *USS Delong* (DE 684) is now with Fleet.



GOING DOWN—Deep-sea diver is readied for a dive. *Below:* Diver leaves suit after surfacing.

HELLO BELOW—Skin diver meets deep-sea diver on the way down during training exercise in Med.





LIFE SAVER—Italian submarine rescue ship, *Proteo,* patrols the Med.

NATO Rescue Ship

In the Mediterranean, the Italian salvage and rescue ship *Proteo* is one of a kind. The 248-foot, 2147-ton *Proteo* is the Italian navy's only submarine rescue vessel, and is the only NATO ship assigned permanent Mediterranean salvage and rescue duties. Her day to day assignments include repair, salvage and towing. Her "customers" are NATO ships of the British, French, Greek, Italian, Turkish and U. S. navies.

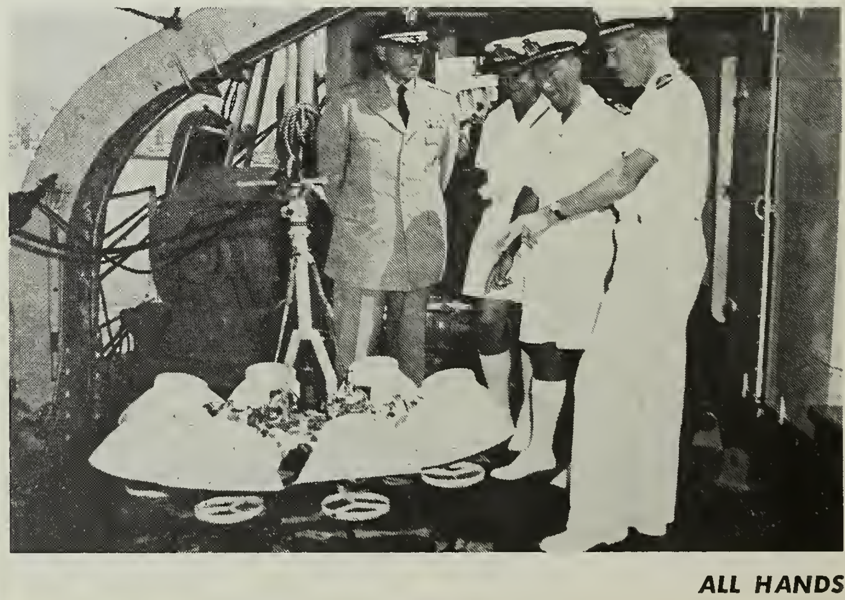
Proteo's primary mission is to save the lives of NATO submariners. She has the equipment necessary to raise disabled submarines from the floor of the sea, and the men (130 officers and enlisted) who know how to use it.

She had been originally designed as a tug, but later modifications made *Proteo* the Italian Navy's only salvage and rescue vessel.

She also has been employed in lending assistance to damaged surface vessels of NATO navies.

Proteo deep sea divers stand by for rescue assignments on a 'round the clock basis. They aren't often called upon to use their talents for floating sunken subs in actual emergencies, but regular training dives under simulated emergency conditions qualify them for the real thing. The ship's divers use heavy armored diving suits (one weighs about 800 pounds) which permit them to remain at great depths for hours, independent of surface-supplied air. But, a diver garbed in the heavy, cumbersome diving suit is restricted in his ability to move about. Therefore, when he

WELCOME ABOARD—U.S. Army and Navy officers, members of AFSouth, get the word from Italian officers about underwater lamps.



wants to change positions, he must signal his intentions to the ship so that crewmen can raise him and move him to the desired spot.

Working over a sunken sub, *Proteo* divers first supply the men inside with fresh air. Then, air valves are connected to the sub's ballast tanks and the ship is refloated.

The supervision of submarine rescue training aboard *Proteo* is one of the duties of the ship's diving officer, LTJG Giorgio Titoto, himself a veteran diver who knows the problems his men encounter in the depths of the sea. LTJG Titoto remains in telephone contact with his divers from the moment they enter the water until they return to the ship. "Once a diver is down, in practice or in an actual emergency, the ship must obey his every command. The success or failure of our mission rests with our divers," he says.

Proteo is now being equipped with a diving bell, which will help speed up underwater rescue operations. In repeated dives, submariners can enter the bell through their ship's hatch, which is opened after the bell is made fast. This will eliminate the slower rescue process which involves supplying air to the submariners, then refloating their ship before they can be taken off.

But, even with the cumbersome diving suits, *Proteo* divers do their rescue work in record time. During one training exercise, for example, *Proteo* divers refloated the Italian sub *Giada* from a depth of 150 feet in 52 minutes. This, *Proteo* believes, is a world's record.

Proteo recovery missions aren't confined to submarines. Last summer she was called upon to recover an aircraft which had crashed in the Straits of Messina and sunk to a depth of 150 feet. *Proteo* divers located the aircraft, made the necessary connections, and the ship pulled her up.

Largest and most powerful of all Italian tugs (originally constructed as a tug; later modified for S&R), *Proteo* is also a valuable NATO tow ship, which, in day to day practice, is one of her major peacetime jobs. She has towed ships and drydocks of all NATO navies in the Med.

Proteo's power has been figured in theory, if not in practice: With her twin diesel engines cranking out 4800 horsepower, she could pull two 51,000-ton *Midway* class aircraft carriers, and still have power to spare.

BEACHED—Battleship *Mikasa* is a good spot to visit at Yokosuka where the 60-year-old warship serves as a national monument.

A Visit to Japan's Battleship Museum

Navymen who visit Yokosuka these days are finding an enjoyable, educational, and inexpensive way to spend a couple of hours of liberty time without even leaving the base: A tour of the old (built in 1902) Japanese battleship *Mikasa,* unveiled as a national monument last summer in Yokosuka.

Externally, *Mikasa* still looks about the same as she did 57 years ago, when she served as flagship for Admiral Heihachiro Togo in the Russo-Japanese War. The damage she received in the Battle of Tsushima (where Japan won a decisive victory over the Russian Baltic fleet) is indicated by "shell holes" painted in black.

Inside the ship, a movie theater, display rooms and a museum have replaced galley and mess halls, and Admiral Togo's flag quarters and the wardroom have been restored. The museum contains relics of the ship's wartime service, pictures of the admiral and his staff and diagrams of the Battle of Tsushima.

Mikasa has long been a Japanese symbol of emergence as a world power. After the war with Russia, in which Japan was a surprising victor, *Mikasa* became the pride of her navy. She displaced 15,000 tons; her battery consisted of four 12-inch and 14 six-inch guns; and she had a top speed of 18 knots.

In 1921 *Mikasa* was ruled obsolete and permanently "moored" in concrete at the Yokosuka Naval Base.

Twenty years later this symbol of seapower was almost forgotten by a nation that was again at war. She was neglected and left to waste.

After World War II, interest in *Mikasa* was revived. Many U. S Navymen, led by Fleet Admiral Chester W. Nimitz, USN, joined the people of Japan in donating to *Mikasa's* restoration, which cost more than half a million dollars. Now, once again, the famous old ship is ready for inspection.

—CDR W.B. Hayler, USN.

ROYAL VISIT—Princess Michiko visits warship *Mikasa* escorted by VADM Nobuo Fukuchi, JMSDF.

SERVICESCOPE

Brief news items about other branches of the armed services.

U. S. TROOPS IN GERMANY have been sent the first units of the Army's new Silent Sentry. This highly portable, front-line, ground surveillance radar reaches through darkness, fog and smoke to pick up and locate enemy soldiers and vehicles. Although a two-man team normally runs the equipment, it can be set up and operated by one man if necessary.

The Silent Sentry, which weighs only 48 pounds including its tripod mount (less power supply and carrying cases), is the lightest tactical radar for ground surveillance to go into production — thanks to the use of transistors. The transistors also reduce power requirements, and thus make it feasible to use batteries. The radar can be powered by an engine-driven generator when tactical conditions permit.

With this equipment, a well trained operator can not only distinguish men from moving vehicles, but can also tell the difference between a man crawling and a man walking. Range and direction are read from simple dials. A man can learn the routine operation of the Silent Sentry with little special training.

★ ★ ★

THE STRATEGIC AIR COMMAND'S *Hustler* is incorporating a new safety technique based on a principle about which women have known for thousands of years but which men have never admitted. Namely, that when a woman speaks a man jumps.

The Air Force finds *Hustler's* control panel lights, which warn the pilot of mechanical malfunctions, are pretty effective, but it takes 12 seconds for an average pilot to react to such warnings.

On the other hand, after a calm female voice recorded on tape cuts into the supersonic cockpit 60,000 feet above the earth with a warning that ice is forming, that the engine oil quantity is low or any of a number of other dangers, it takes the pilot only three seconds to snap into action and remedy the situation.

Nine seconds may not seem like much but, to a pilot traveling at 1300 miles per hour, it could mean the difference between covering a lot of air (more than three miles) and covering a lot of ground.

ARMY'S mobile transistorized radio communication system, AN/VRC 12, covers 920 different channels.

ALL LIT UP — A USAF B-52 *Stratofortress* stands ready during 'alert' training at Travis AFB, Calif.

The voice in the cockpit is that of Mrs. Gina Drazin, a secretary employed by the company manufacturing the *Hustler.* The messages to the pilot are repeated until the malfunctions are corrected or until the pilot switches the voice off.

When two or more emergencies arise simultaneously, the voice feeds them to the pilot on a priority-of-importance basis.

★ ★ ★

COAST GUARD engineers have reported that their new 30-foot MK-III plastic utility boat passed its rough water examinations with flying colors. In tests off Cape May, N. J., the boat's accelerometers recorded six "Gs" during high-speed runs into six-foot seas without any structural damage resulting.

The craft, which is powered by a 300-horsepower turbo-charged diesel engine, has a top speed of more than 27 knots. The new model will go into production to replace the utility boats now used by the Coast Guard.

Engineers expect the use of plastic in the hull will reduce operating and maintenance costs considerably.

★ ★ ★

NATIONAL GUARD Air Defense missile units will receive the more powerful *Nike-Hercules* missile beginning late in 1962. It will replace the *Nike-Ajax*, the first generation of the Army's supersonic *Nike* missile family.

Ajax, which can destroy any known type of operational bomber, will continue on station until replaced. Army National Guard units in Hawaii already have the *Nike-Hercules.*

The move to replace *Ajax* in National Guard units is another step in a modernization program for Army air defense which started early in 1950. At that time the active Army units began to convert from antiaircraft artillery guns to *Nike-Ajax* missiles. The first tactical units armed with *Ajax* moved on site in the air defense system in December 1953. Army National Guard units took over the vacated guns.

In 1957 a second step was taken when the active Army began to convert from *Nike-Ajax* missiles to the

Nike-Hercules. As the active units vacated the *Ajax* sites, Guardsmen moved in and assumed around-the-clock responsibility for the sites. They became full partners in the air defense system.

The present move will equip the Army National Guard units with the same potential as active Army units. An extensive retraining program to prepare the Guard units for handling *Hercules* is planned. Their training will be the same as that now required for active Army units.

★ ★ ★

THE LONG-STANDING distance record of the Navy's *Truculent Turtle* has finally been broken. Established in 1946, the P2V's mark of 11,235.6 miles in 55 hours, 17 minutes, was finally claimed by a Strategic Air Command B-52H heavy bomber which flew without refueling from Kadena AB, Okinawa, to Torrejon AB, near Madrid, Spain, a distance of 12,519 miles. The flight required 21 hours, 52 minutes.

In all, 11 new records were claimed by the Air Force for the flight. The two major records included:

- World's distance for all types of aircraft without refueling.
- World's Class C distance for jet aircraft without refueling.

The other records claimed were those relating to check points encountered en route. The course flown was a modified great circle over Tokyo, Seattle, Fort Worth, Washington, D. C., and Lajes in the Azores Islands to Torrejon AB.

The aircraft weighed 244 tons at take-off. It flew at altitudes ranging from 40,000 to 50,000 feet and had an average ground speed of 575 miles per hour. A top speed of 662 miles was reached. Commander of the plane was Major Clyde P. Evely.

★ ★ ★

FORT POLK, LOUISIANA, has turned into almost an "emergency field" for the U. S. Army. It was first established as an armored division training center in 1941, closed in 1946; reactivated in 1950 for Korea, closed in 1959; and now it's been activated again.

SOME EAR-BANGER — Members of 28th National Guard Division practice with 155mm howitzer.

MISSILEMEN—USAF technicians work in the control point for missile firings at Vandenberg AFB, Calif.

Fort Polk is the second Army Training Center to be established following the decision of the President to increase the size and conventional combat capability of the U. S. Army. Fort Carson, Colo., was the other.

Fort Polk was selected as a training site because of its range facilities for a wide variety of weapons, its excellent tank and armored vehicle training area, its large maneuver area and armored vehicle training area, the large maneuver area adjacent to the port, and excellent barracks facilities.

Maximum training load anticipated at Fort Polk will be 14,000 soldiers. They will be trained and supported by a 5000-man military and civilian force.

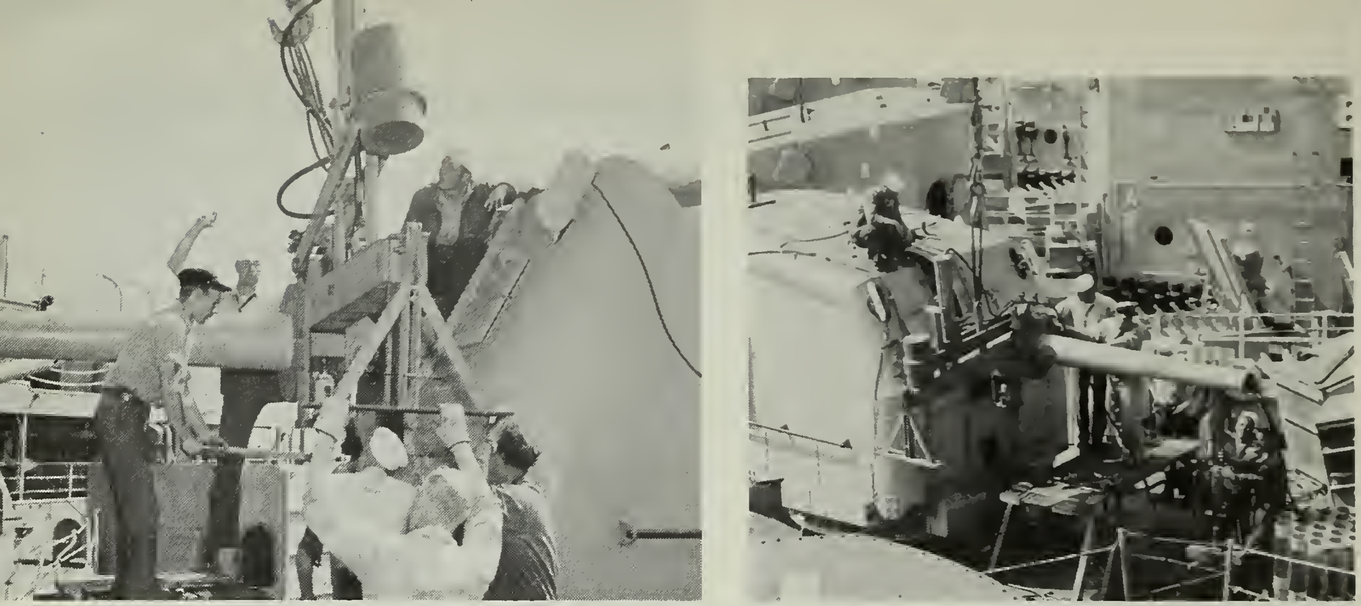
★ ★ ★

THE AIR FORCE has unveiled a manned, mobile, 80-ton vehicle called *Beetle* which features closed circuit televison and artificial 18-foot arms and is designed for close-in work on radioactive materials.

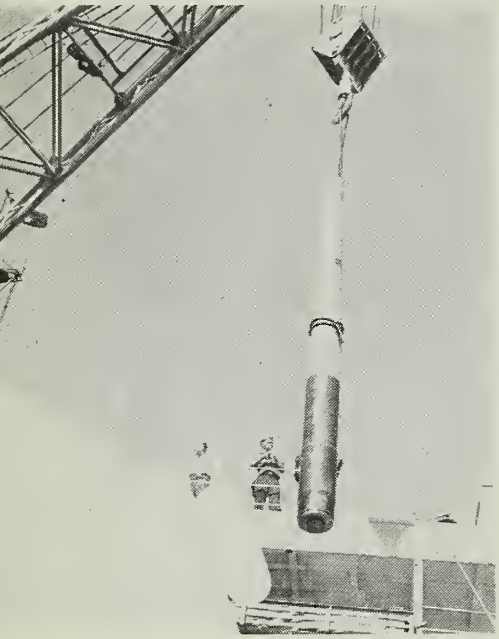
Originally developed for use in the nuclear aircraft program, *Beetle* will be employed in nuclear rocket and reactor work. It will be shipped to a Nevada test site for a six-month testing program to be conducted by the Air Force Special Weapons Center in cooperation with the Atomic Energy Commission.

Mounted on tank-like treads, the air-conditioned cabin of the vehicle, in which the operator sits, weighs 80,000 pounds, and is protected from radiation by one-foot-thick lead shielding. Five windows in the cab are constructed of specially leaded glass panes two feet thick. The cabin can be raised on supports to a height of 25 feet and rotated by the operator. The operator will also be able to manipulate the long artificial arms to perform the delicate operations and/or adjustments which may be necessary in working on a radioactive rocket or reactor.

The television camera, mounted on one of the long arms, can be extended around corners or inside active reactors, transmitting the picture to a screen inside the protected cab. The Air Force hopes to use information gained from the testing program in the possible design of future air-transportable vehicles in its nuclear power program. Anyone for nuclear TV?



REPAIR personnel from *USS Dixie* (AD 14) unlock *(right)* and reseat barrel on mount of *USS Tingey* (DD 539).



Destroyer's Best Friend

OVER THE YEARS USS *Dixie* (AD 14) has rendered countless services to destroyers of the U. S. Pacific Fleet.

With her many shops, plus an almost endless assortment of equipment and other facilities, there have been few limits to the size and type jobs undertaken by the destroyer tender.

Even so, *Dixie* managed to add another "first" to her growing list of accomplishments when her gunner's mates removed, replaced and reseated the barrels of all 5-inch gun mounts that make up the main battery of the destroyer USS *Tingey* (DD 539).

The rifling in the destroyer's gun barrels had worn smooth enough to alter substantially the trajectory of projectiles fired from them. This made it necessary to replace them to return the onetime Naval Reserve training ship to top battle readiness.

After one day of preliminary preparations, gunner's mates from *Dixie* and *Tingey* worked in two eight-hour shifts to complete the job in half the number of calendar days normally required.

The destroyer was alongside *Dixie* in San Diego Harbor for a four-weeks' availability when the regunning was accomplished. She's now on the job with the Fleet.

—John Burlage, JO3, USN.

REPLACEMENT barrel is placed in destroyer's mount. *(Above)* Crane lowers barrel from deck of tender.

LETTERS TO THE EDITOR

School and Sea Experience

Sir: I'd like to know why the Navy is assigning "A" school graduates, who have no sea duty experience, to shore duty for the remainder of their first enlistments. It seems to me that experience in the Fleet early in a man's career is desirable and necessary if he is to be a balanced, versatile sailor who knows what all the Navy is like.

Another point: "A" school graduates should be utilized at sea so that men already at sea, who've been there for a long time, may become eligible for shore duty a little sooner.

If a man enlists in the Navy, he should be prepared to serve on board ship. I think the choice duty should be more fairly distributed among all Navymen. — C.F.E., PN2, USN.

• *For the record, the shore tour for an "A" school graduate assigned directly ashore from school is for the balance of his first enlistment unless a six-year enlistment is involved, in which case rotation is effected three years before the enlistment expires ("Enlisted Transfer Manual," Art. 2065).*

In practice, however, comparatively few "A" school grads are actually assigned to shore duty for the remainder of their first enlistments. When they are, it is only after the assignment people figure it is necessary to fill an urgent service need.

The whole idea of making such assignments was thoroughly debated by personnel planners before it was decided to go ahead with the plan. There are a number of good points in the system, the main consideration being personnel stability. There are some bad points, however, and these you have pretty well spelled out.

But, as we've pointed out, comparatively few assignments to shore duty for first-term "A" school grads are actually effected. One of the reasons for this is that many students don't indicate "Prefer Shore Duty" in the remarks section of their assignment data cards.

If a man wants sea duty, he will be sent to sea if that's where he's needed. If he desires shore duty, it's shore duty he'll get, if he is needed ashore.

In other words, the needs of the service dictate who serves where, whether it involves an "A" school grad or any other Navyman. But, personal desires are always considered, and, if it's possible, a man is given the duty of his choice. — Ed.

Broken Service and Seavey

Sir: If a man does not reenlist immediately, but does so within 90 days after discharge, does he lose his place on the Seavey? — R. R. C., EN2, USN.

• *If you reenlist within 90 days, you do not lose your previous sea credit. You do lose your place in the current Seavey, however, and must wait until the following year. Incidentally, if you reenlist within a 90-day period and don't go back to sea within a six-month period you must start a new sea tour. This is the word contained in the "Enlisted Transfer Manual," Art. 3.23 and 3.31d.* — Ed.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept. Washington 25, D. C.

Good Conduct Medal

Sir: *Navy and Marine Corps Awards Manual*, NavPers 15790 (Rev. 1953) lists a note at the bottom of page 29 regarding eligibility for the Navy Good Conduct Medal which has me somewhat confused.

My question is: When computing eligibility for a Navy GCM, can periods of time, as listed on pages 30-32 of the *Awards Manual*, be broken? For example, if a man's good conduct period begins on 1 Nov 1958, do you go by the requirements in effect for the 1 Jul 1956 to 1 Nov 1960 period to determine his first two years of good conduct, and then go by the new and more stringent requirements which went into effect on 1 Nov 1960 to determine his third year of good conduct? This would necessitate considering only his military behavior and military appearance marks for the first two years, and then considering all five of his trait marks for the third year.

I say that procedure in the above example is correct. Some others, however, maintain that since the medal is being requested after 1 Nov 1960, the man should be considered eligible or ineligible in accordance with the regulations in effect since 1 Nov 1960. Who is right? — J.J.B., YN2, USN.

• *You are correct. When the service requisite for the GCM is covered by two regulations, entitlement to the award is determined in accordance with the regulations in effect during the period being reviewed. Thus, in the example you used, the individual whose good conduct period begins on 1 Nov 1958 must meet the qualifications in effect from 1 Nov 1958 through 31 Oct 1960, and must fulfill the new qualifications in effect from 1 Nov 1960 to 31 Oct 1961, at which time he completes the required three years. As you say, only two conduct traits determined eligibility from 1958 to '60; five conduct traits apply since 1960.* — Ed.

How About That!

Sir: I would like to find out about the change in the qualifications for advancement from E6 to E7.

I have seen a BuPers Notice which, among other things, says that it's no longer necessary for an E6 to take performance tests for advancement to Chief. The Notice came out in September or October of 1960 but I don't recall the number.

Others have seen it too, but nobody remembers the number. I have checked with the training and personnel offices here but they don't hold such an instruction.

Can you locate the Notice number or tell me if my information about advancement is correct?—E.A.B., RM1, USN.

• *Our research leads us to believe that your Notice must be like a left-handed monkey wrench. Many have heard of it but nobody has seen one.*

Our advice is to stop looking for the Notice and get back to studying. Such a Notice has not been issued and none is contemplated. — Ed.

Length of Shore Tour

Sir: I am presently stationed ashore, but am approaching the time for return to sea as a QM1. I was recently advanced to QMCA, however, and now there are several differences of opinion here at my command as to whether I will now serve a QMC shore duty tour of three years, or whether I still come under my original QM1 two-year tour. What's the answer? — S. L., QMCA, USN.

• *One answer coming up now, and a sea duty tour shortly.*

Art. 7.26a of the "Enlisted Transfer Manual" points out that the length of an individual's shore tour depends on his rate at the time of reporting for shore duty. — Ed.

Voyage to the Pribilofs

SIR: The article in the December issue of ALL HANDS entitled *"Union Brings Home the Fur"* brought back memories of the time I served aboard USS *Spica* (AK 16) on a voyage to the Pribilof Islands for a shipment of fur.

I was sorry to learn that *Union* was the last Navy ship to make the voyage because I considered it one of the highlights of my career to see both St. George and St. Paul Islands 75 per cent covered with seals, and watch the natives in their skin boats transferring cargo to and from *Spica*.

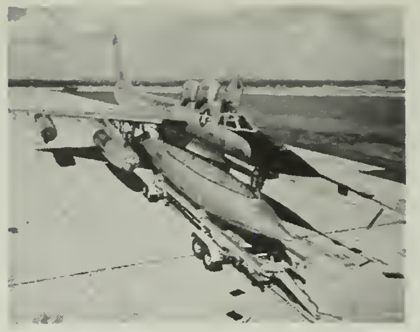
We also saw white fox on the islands which were so tame they would stand still until we were only two or three feet from them, then they would disappear among the rocks.

The Pribilofs are shrouded in fog during most of the year and, for that reason, make an ideal breeding ground for fur-bearing seals. — W.J.S., CMM, USN (Ret).

• *The fact that each year ships sail away from the Pribilofs with thousands of pelts in their holds seems to indicate a fur-bearing seal never learns.*

If the seal were smart like a fox, he, too, would disappear among the rocks anytime he saw anyone equipped with zippers instead of flippers.

Thanks for your interesting note on Spica. *It just proves once again that Navymen get around.* — ED.



PORT WING is almost invisible in this view of USAF B-58 being fitted with a fuel armament pod.

Half a Wing?

SIR: I'm a little late in getting this letter off to you, but I am still intrigued by a picture of the Air Force B-58 *Hustler* bomber which appeared in your September 1961 issue on page 42.

Neither I nor anyone else in the office could locate the port wing. Surely it has one, but where is it?—N.P.M., PN1, USN.

• *There is a port wing. It is almost invisible because the wing is swept back 60 degrees, thus is hidden by the fuselage. The wing angle plus the angle at which the photograph was taken add up to a phantom wing.*

If you look carefully, you will see the shadow of the port inboard nacelle appearing on the ramp under the nose and just behind the nose gear.

You can also get a glimpse of the forward rim of the nacelle just past the windshield of the pilot's compartment. — ED.

Reserve Medals

SIR: According to the 15th edition of the *Bluejackets Manual*, the Naval Reserve Medal is still being awarded. My shipmate says the medal was discontinued. Can you tell me which of us is right?

I would also like to know if a Reservist may receive a Good Conduct Medal. — A. S., SA, USN.

• *Both you and your shipmate have a point. The Naval Reserve Medal was discontinued as of 12 Sep 1958. However, the medal is still being issued to those who completed 10 years of qualifying service before that date.*

The Armed Forces Reserve Medal is awarded for 10 years of qualifying service completed after the 12 Sep 1958 cutoff date.

If you are eligible for either medal, you should apply, by letter, to the Chief of Naval Personnel. Officers receive theirs via the Reserve Officers Recording Activity, Omaha, Neb.

Any Reservist who has been on continuous active duty for three years and meets the other requirements outlined in the "Navy and Marine Corps Awards Manual" (NavPers 15790) is eligible for the Good Conduct Medal. — ED.

A Good Idea, We Say

SIR: Several years ago, when I had been particularly impressed with an issue of ALL HANDS, I submitted the subscription blank which is always included in the magazine and had a one-year subscription mailed to the library of my home town high school.

I have repeated this action every year since, feeling that it might possibly prove an aid in recruiting high school students into the Navy upon their graduation. I cannot positively state that my actions have been instrumental in enlisting anyone in the

Getting Ready to Write a Letter?

SIR: I have noticed that ALL HANDS answers letters on a great variety of questions, even technical career questions. Some of my shipmates seem to think that they can get a better answer by writing their Congressman. My question is: Who gives out the answers? — J.F.D., YN1, USN.

• *When a Congressman gets a letter from a Navyman, he refers the matter to an expert within the Navy Department, usually right here in the Bureau. When* ALL HANDS *gets a letter, it is referred to the same place. When an individual writes an official letter to the Chief of Naval Personnel, via the CO, it goes again to the same place. The result, of course, is that in each case the same answer is given — the correct answer.*

When you write to ALL HANDS, *if your question is one that other Navymen would be interested in, it gets into print. We like to think it cuts down on paperwork. Congressional referrals are, as you'd guess, acknowledged. Then the question is routed to the Navy Department. The cognizant desk acknowledges. Then the question is answered and given to the Member of Congress. The Member of Congress then writes to you, giving the answer. Answers and referrals are typed up in each case and logged. That takes time — and money.*

When you write to us, your letter is put on a routing slip and sent to the desk that handles it — or, a member of the staff picks up a phone and gets the answer. Our routing slip has space at the bottom for a reply, and usually the memo is written directly on it and sent back to us. We then answer you. Our answers, of course, are unofficial. Nevertheless, they come from the cognizant desk and they are as complete and clear as we can make them.

When you'd like an entry placed in your official record, or if you have a personal career question, the most expeditious procedure is to write via your CO. For example, if you wanted an entry as to a medal or award, this procedure would mean that your CO would receive the necessary document for your record and a copy would go into your jacket.

Duty assignment, humanitarian shore duty, hardship discharge, early separation and leave questions, with an individual slant, are most quickly handled by a letter from you to the Chief of Naval Personnel, via your commanding officer. Let's take humanitarian shore duty. If you write your Congressman, or ALL HANDS, *you'll get an answer, but you will still have to submit an official request via your CO. In each case decisions are based on "the individual needs of the case."*

These are the avenues that are open to you. But when you're getting ready to sit down and write a letter, remember there's one more way to get the word and get it fast. You'll probably find that you can get it right at your ship or station — from the personnel office, from the education officer, from the legal assistance office, from the chaplain, or from your division chief or officer, your exec or your CO. Give them an opportunity to help. — ED.

Navy. I do feel, however, that if my contribution were to be multiplied many hundreds of times throughout the country, numerous "bonus" recruits might be attracted to the Navy by the informative and interesting material provided by All Hands in its present format.

What do you and your readers think? —R.M.S., Jr., LCDR, USN.

• *We are, naturally, extremely gratified by your kind remarks about the magazine, and feel that your idea contains much merit as a community relations gesture in which every Navyman could do his part — on a purely voluntary basis, of course. We'll be interested to hear the response of other readers.* — Ed.

Not So Plane to See

Sir: I did a double-take at the caption for the inside back cover picture in your January 1962 issue. It spoke of aircraft in flight. I was able to spot two helicopters right away, but it took a good deal longer to locate ten fixed-wing aircraft.

How many planes were there (in flight) in this picture?—B. C., LT, USNR.

• *Another view of the same group of ships and planes shows (we think) 13 fixed-wing planes in flight, but some of them appear to have flown off the page in the reproduction on the inside back cover of the January 1962 issue. At any rate, a majority of the experts (?) here at* All Hands *claim to be able to spot 12 planes in flight in the reproduction you saw, plus the two helicopters.*

You have our congratulations. Since you found two of the helicopters right off, and, eventually 10 of the planes, you will be pleased to know that you have just passed the new and much stiffer eye exam devised by our layout editor. — Ed.

Request for Flying Duty

Sir: I recently checked aboard my present station and the question of my eligibility for flight pay has come up.

About 14 months ago, I completed a training program in a Regular Navy squadron and was designated an ASW plane captain aircrewman (8263).

I am now assigned to technical training at this command as an instructor and have been informed that, in this position, I am not eligible to draw flight pay.

I still maintain my proficiency in a local aircrew training school in my spare time. However, the following excerpts from BuPers Manual, Part C, seem to indicate that this is for nought.

Article C-7403, Paragraph (4), states that commanding officers shall disqualify a man for aircrewman duty and cancel his enlisted code whenever he has been detached from duty involving flying for longer than four years.

PLANE TO SEE?—The question: 'How many planes and copters on inside back cover of Jan 62?' Those located so far have been marked.

THIS HELPED — This photo from our files helped to find hard to see aircraft in the cover photo.

Paragraph (5) states that a man disqualified under the above circumstances is not eligible to requalify during the enlistment under which he was disqualified.

My questions are these:

Are there any regulations that establish assignment to flight pay?

How can a man who is assigned to a ground job have any control over the time that he is away from flight duty?

In my case, I was assigned to a VA squadron for eight months and then assigned to shore duty. Ashore I am in an instructor billet and will probably stay there during my three-year tour.

I will have three years remaining on this enlistment when I complete this tour, but, according to the regulations I quoted, I can't requalify until I reenlist.

I am not serving in my present assignment through my own choice. Unless there is some regulation I have overlooked, it seems that I wasted a lot of time qualifying for flight pay. — G.I.K., ADR2, USN.

• *There is a regulation governing assignment to duty involving flying and its attendant flight pay. It is BuPers Inst. 1326.1B.*

Orders issued under this instruction are called temporary flight orders and are for a specific period when a member is ordered to duty involving flying.

To aid in the administration of flight orders, enlisted members of a squadron who are regular members of an aircraft crew can be issued flight orders for an indefinite period, thus orders remain in in effect until cancelled. They are cancelled when the member is detached from duty which requires his participation in frequent and regular flights.

Navy assignments are made primarily to take care of the needs of the service and not necessarily for the convenience of the individual member concerned.

It is unfortunate, from an individual standpoint, that occasionally an otherwise eligible member must be deprived of flight pay because he is needed for ground duty.

In your case, you are grounded until the Navy again needs you for a job which involves flying. This does not mean that you have wasted your time qualifying for flight pay or that you are wasting it in maintaining your proficiency.

In making assignments, the Navy tries to bring together both personal preference and the good of the service. If you want to fly, and it seems obvious that you do, your choice of duty and qualifications for such duty should be included in your Seavey/Shorvey preference cards. These will be consulted when you are due for reassignment. If you are needed in a flying billet then, you stand a good chance of getting it.

A word to the wise — be sure that your duty preferences and your qualifications are listed on the cards. — Ed.

ATHLETES' FEAT — Representatives of UDU-1, Coronado, Calif., get third straight ComPhibTraPac Admiral's Cup for athletic excellence.

Wants to SCORE

Sir: This is in reference to the All Hands article about converting to another rating under the SCORE program (All Hands, December 1961). I read your article, and also BuPers Inst. 1440.27, which outlines the complete program, but I am still confused about one point.

I am now in the Ready Reserves, having completed a usn four-year hitch last June. I decided to leave the Navy because I was in a field that was closed for advancement (YN) — one in which I had no real desire to spend 20 years.

When I enlisted in June 1958, I requested CT training, but I was "needed" in the YN rating. During my four years as a YN I tried to convert to CT, but was unsuccessful.

Now that I am no longer on active duty, I see that YNs may now convert to CT, under SCORE, with the Navy's blessing. Would I have to go back on active duty before I could apply for SCORE? May I apply for it through my Reserve Center? — L.D.S., YN2, usnr.

• *Whether you're Regular or Reserve, you must be on active duty to be eligible for SCORE. (SCORE is the Selective Conversion and Retention program, under which POs 3 and 2 and designated strikers of non-critical ratings are guaranteed certain school and advancement benefits as incentives to convert to the critical ratings.)*

Once you're on active duty, your commanding officer may recommend you for SCORE conversion to CT provided, of course, you are eligible as outlined in BuPers Inst. 1440.27. The program's selection board and CT planners then go over your qualifications and interests and may accept you for CT school and conversion.

Too bad you weren't able to convert to CT while you were still on active duty. At the time you were discharged, SCORE was in planning stage. The program became effective 2 Oct 1961. — Ed.

First to SCORE

Sir: The first man to take advantage of the Navy's new SCORE program on board uss *Grand Canyon* (AD 28) was James A. Earp, SK2. On 23 Oct 1961 — three weeks after SCORE was made official — Earp applied for permission to train for MR. On 14 November his request was approved by the Bureau, and he is now at the MR "A" School. — K.L.H., LTJG, usn.

• *Many others have welcomed SCORE (Selective Conversion and Retention), especially men who have been locked in crowded, slow-moving rates with slim chances for advancement. For the information of readers not familiar with SCORE, the program offers to eligible, designated strikers and E-4 and E-5 petty officers in crowded ratings the opportunity to convert to one of the open ratings, with, in many cases, guaranteed A and B School, advancement without examination, reenlistment bonus and eligibility for automatic pro pay. SCORE is explained further in BuPers Inst. 1440.27, and in the December 1961* All Hands. — Ed.

Form and Figures

Sir: There is a difference of opinion in my command regarding the revised Recommendation for Advancement or Change in Rating form (NavPers 624W, Rev. 3-61), which has been incorporated into BuPers Inst. 1430.7D (the official guide to the advancement of enlisted personnel). Perhaps you can clarify.

Before this new 624 form was adopted, individual commands were instructed (by the old 624) to compute "service in pay grade" factors and multiply by two. The revised 624 has a place for the service-in-pay-grade factor (block 10), but it does not indicate that this factor should be multiplied by two. BuPers Inst. 1430.7D, meanwhile, indicates that service in pay grade is, in fact, still multiplied by two. — D.L., YN1, usn.

• *Service-in-pay-grade factors are still multiplied by two — but not by the commands filing 624s. With the revised recommendation for Advancement or Change in Rating form (624W), all the command has to do is list the years and months in pay grade of the man (or woman) concerned, and submit the form to the Naval Examining Center. Machines take it from there — automatically.* — Ed.

STARs and Strikers

Sir: In All Hands a few months ago I read a letter from a seaman who reenlisted under the STAR program, but, before he was admitted to YN "A" school, he was advanced to YN3. He was then ordered to YN "B" school, after which, it was pointed out, he could be advanced to YN2 upon the recommendation of the school's commanding officer.

This seems to indicate that the YN involved was a non-designated striker when he reenlisted under STAR. Is this permissible?

I put in a request for YN "A" school and STAR reenlistment, but was turned down and told I first had to become a designated striker. — M.J.M., SN, usn.

• *You have reason to be confused, especially if you read the Bulletin Board section of that same issue of* All Hands *(November 1961). In it we outlined the STAR program (Selective Training and Retention), which guarantees enlisted men serving on their first hitch a service school, and, in some cases, automatic advancement without examination, in exchange for a four- or six-year reenlistment.*

You do not have to be a designated striker before you apply for STAR. We suspect that whoever turned down your request may have STAR confused with SCORE (Selective Conversion and Retention), under which POs 3 and 2 and designated strikers of non-critical ratings are guaranteed certain school and advancement benefits if they con-

vert to a critical rating. Pay grade E-3 personnel must be designated strikers to qualify for SCORE.

However, before you strap on your shootin' iron and head for your personnel office, we suggest you check BuPers Inst. 1133.13A, which is the official guide for the STAR program. You may find that for some reason other than rating requirements you wouldn't be eligible anyway. For example, you would need the approval of the Chief of Naval Personnel before you could be ordered to YN "A" school. YN is not one of the Navy's critical ratings, and STAR, in addition to being an attractive incentive to ship over, is also one of the ways the Navy tries to get good men into the critical ratings.

Additional information on SCORE, which is a more concentrated program of filling the critical rating gap, is contained in BuPers Inst. 1440.27. — Ed.

REFRESHMENT TIME — Thai orphan receives scoop of ice cream from T. R. Leiber, SA, USN, during a party on board *USS Maury* (AGS 16).

Inland Rules

Sir: During a classroom study of Rules of the Road, a question was raised as to whether whistle signals are required in inland waters when a crossing situation exists. An examination of various Inland Rules publications revealed no such requirements.

The *Pilot Rules for Inland Waters* states that in a crossing situation a one-blast signal by the privileged vessel signifies his intention to hold course and speed.

In Knight's *Modern Seamanship,* I find "The failure of a privileged vessel to answer a crossing signal in inland waters, which violates the rule, is not an assent but is the same as a dissent."

As I interpret this, the idea that signals are required in an inland waters crossing situation is merely implied.

CAPT R. F. Farwell's *The Rules of the Nautical Road,* in discussing this, notes "The privileged shall announce her intention of holding course and speed by sounding one short blast in a timely manner and the burdened is required to answer with one blast, at least if the approach will be within one-half mile."

Certain Courts of Appeal do not agree on this matter. One has held the signal by the privileged is mandatory; another that the signal is permissive but not mandatory.

What does make sense to me is another statement by CAPT Farwell: "Until the Courts agree on this point, or the Supreme Court decides it, the navigator in inland waters should act on the theory that he cannot go wrong in using the signal, and may be held at fault if he does not use it."

Has this question been resolved? Should navigators use the signal as CAPT Farwell suggests? — L. W. I., LTJG, usn.

- *The Admiralty Division, Office of the Judge Advocate General, tells us the Courts have not yet clarified the provision for a one-blast whistle signal by a privileged vessel in a crossing situation.*

But, it is noted, the statement by CAPT Farwell, with which you agree, is as competent an observation as any that might be made.

The cases cited in the books you mentioned have not been reversed or otherwise modified. A thorough interpretation, however, should not be based on these cases alone. A close look at the question, with a study of pertinent examples, can be found in Griffin's The American Law of Collision. *Other cases on this subject should be read for comparisons.* — Ed.

Precedence of Ratings

Sir: In your October 1961 issue you published a report on the Navy enlisted rating structure. We would like to know if the order in which the ratings were listed reflects the precedence each rating holds. Our personnel office has a precedence list for enlisted personnel (Art. C-2103, *BuPers Manual*), but this does not break any rating down — i.e., ADR, ADJ, etc. We are particularly anxious to obtain a correct list of rating precedence in the aviation branch. — A.A., AT2, usn.

- *The precedence list for Group IX (Aviation) ratings is: AD, AO, AQ, AT, AE, AM, TD, AB, PR, AG, AC, AK, PH and PT. Service ratings have the same precedence as the related general rating and are equal with one another at the level of the general rating. For example, ADJs, and ADRs would be equal with one another, but an ADJ would take precedence over an AO.* — Ed.

Fitness Reports

Sir: Could you clarify for me the type of fitness report which should be made out for Naval Reserve officers who report to a ship for their annual two weeks' active duty for training?

I believe that it should be a "concurrent" report, and that upon completion of the two weeks' training duty it should be mailed to the officer's Reserve unit.

Others (namely the captain and executive officer of my ship) believe that it is a regular report, and that it should be mailed direct to the Bureau.

While awaiting your answer, I am mailing the reports to the Bureau — naturally. — D. C., YN1, usn.

- *You'd best continue doing what comes naturally. In other words, those others (namely your CO and XO) are right.*

Art. B-2203(6)(f) of the "BuPers Manual" is specific in classifying active-duty-for-training reports as "regular." To understand this, you must go back into the background of concurrent reports and their customary application.

Concurrent reports normally are made when an officer is assigned some sort of additional duty with another command, with the knowledge of his regular senior and frequently on his order. Under these circumstances, these concurrent reports serve to keep his regular reporting senior advised of his performance.

Active duty for training, on the other hand, is usually obtained individually by the officer concerned, directly from his district commandant, and may have no relationship to his Reserve unit duties, if he happens to belong to such a unit. Consequently, his fitness report is of no specific interest to his Naval Reserve unit commander. — Ed.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Warren* (APA 53) — The 10th annual reunion will be held at the President Motel, Atlantic City, N. J., on 1, 2 and 3 June. Further details are available from Allie Frank, P. O. Box 247, South Orange, N. J.
- *93rd Seabees* — The 13th annual reunion will be held at the Detroit Leland Hotel, Detroit, Mich., on 30, 31 August and 1 September. For more information, write to Darle Christy, 4204 East 69th St., Kansas City 32, Mo.
- USS *Elmore* (APA 42) and USS *Electra* (AKA 4) — A joint reunion is planned for July near Baltimore, Md. For details write to Henry H. Baldwin, Jr., 219 Burning Tree Road, Timonium, Md.
- USS *Liddle* (APD 60) — All those who served on board in New Orleans, La., who are interested in holding a reunion, are invited to write to Frank Biddinger, Purdom Rd., Monrovia, Md.
- USS *Perry* (DMS 17) — A reunion is planned for men who served on board at the time of *Perry's* sinking, 13 Sep 1944. Those interested may write to Russell Dempster, 403 Seventh Ave., S. E., Oelwien, Iowa.

More Bean Soup, a la McGinty

SIR: Re your article "Bean Soup *a la McGinty*," on page 43 of the January 1962 issue. I too licked my chops in anticipation of preparing Navyman Joseph Ventura's exotic combination — only to discover to my bitter disappointment that you didn't print the recipe. How come? — E. M. Dailey, CAPT, USN.

- *Well, er, ah — it's this way, Captain. We didn't print the recipe because we could just picture a world-wide correspondence building up as fellow bean soup lovers from hither and yon beaned messages across great oceans and huge continents to* USS McGinty *(DE 365) asking — ah, to heck with it, let's quit all this shilly-shallying. It all boils down to this — we just plain neglected to print it.*

Our apologies to you and all other devotees of the bean. And, herewith, Chef Ventura's prize-winning recipe for six servings of Bean Soup a la McGinty:

Take one and one half cups of Michigan Navy beans, five and one half cups of water, four ounces of diced pork sausage, three tablespoons fresh carrots, three tablespoons green onion, one bouillon cube, one half cup canned tomato soup, one and one half teaspoons salt, one half tablespoon black pepper, one tablespoon dehydrated potato granules and one tablespoon monosodium glutamate.

Place beans, water, sausage, carrots, onions and bouillon cube in a saucepan. Blend. Bring contents to a boil. Cover. Simmer for two hours on low heat. Let cool one hour. Drain, and save stock. Grind remainder, then recombine with saved stock. Blend in tomato soup, salt, pepper, potato granules diluted with one cup of water, and monosodium glutamate. Cook on low heat for 30 minutes, stirring frequently. Serve hot. You're welcome. — ED.

Chief Master-at-Arms

SIR: According to the training manual, *Boatswain's Mate 1 & C*, the Chief Master-at-Arms is, by virtue of his office, the senior enlisted man on board ship.

This seems to conflict with Article C-2103 of the *BuPers Manual.* I have looked through *Navy Regs* and couldn't find any clarification.

It is hard for me to believe that a chief machinist's mate, for instance, would be in a position to issue military orders to a chief quartermaster or a chief boatswain's mate.

Also, it states in *Navy Regs* that the senior CPO will be mess president. Wouldn't this conflict with the mess deck chief-master-at-arms mentioned in the training manual? — D.C.G., SMC, USN.

- *You're just hitting the high points, Chief. In the first place, the training manual you cited specifically outlines the duties of the chief master-at-arms and the mess deck chief master-at-arms. It also states masters-at-arms do not interfere with the internal administration of any division.*

Secondly, your reference in the "BuPers Manual," Article C-2103 gives military precedence unless otherwise directed by competent authority.

Thirdly, the "Navy Reg" you missed was Article 0806. Here it states (as does the training manual you read) that the CMAA is assigned, as an assistant to the executive officer, to maintain good order and discipline.

In other words, the authority of the CMAA to perform the duties and functions outlined in the "BM 1 & C training manual" comes from the executive officer. The XO's authority overrides normal military precedence. — ED.

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Firing the Tartar

SOMETHING NEW has been added to Pacific waters, in the shape of a snappy-looking destroyer with a guided missile punch. She is USS *Henry B. Wilson* (DDG 7), the first guided missile destroyer to be assigned to the Pacific Fleet.

USS *Wilson* is also the first ship assigned to the Pacific to be armed with the *Tartar* ship-to-air guided missile. *Tartar* is a supersonic homing missile designed to knock down fast-flying enemy aircraft. For the enemy below the new destroyer is equipped with *Asroc* (for Anti-Submarine ROCket), the latest in ASW weapons.

The greyhound with these missile muscles was named in honor of the late Admiral Wilson, who commanded the U. S. naval activities in France during World War I. The ship is homeported at San Diego, Calif.

Clockwise from Upper Left: (1) Guided missile destroyer USS *Henry B. Wilson* (DDG 7) cruises through Pacific waters. (2) *Tartar* is fired from its launcher on the DDG's stern. (3) Guided missilemen check out a *Tartar* on board USS *Wilson*. (4) Missiles stand guard against air attack. (5) USS *Wilson* fires *Asroc* while taking part in Fleet exercises.

Riding on Rhodes

If you find yourself in a ship bound for duty with the U. S. Sixth Fleet in the Mediterranean, chances are you'll have an opportunity to visit many interesting places before you return to the States. One such place might well be the Greek island of Rhodes.

Assuming you're fortunate enough to pull liberty on this 545-square-mile island, here's a preview of what you can expect to find there. These photos show but a few of the many sights taken in by Navymen from the U. S. Sixth Fleet flagship uss *Springfield* (CLG 7).

Reading from top down: (1) Bicycling Navyman pauses to watch Greek fishermen try their luck near the spot where the Colossus of Rhodes, one of the Seven Wonders of the Ancient World, supposedly stood athwart the entrance of the harbor. The fort across the channel once helped knights of Crusade times defend the island from attack. (2) Gene Fedoration, YNC, usn, and David Engle, MU3, usn, along with two other Navymen, take a close-up look at an ancient castle on the Greek island. (3) Windmills and a bicycle, trademarks of the island of Rhodes, are combined into part of a sightseeing afternoon for Don Grant, PH1, usn. (4) Two Sixth Fleet sailors emerge from the arch of a castle that protected islanders against fierce attacks hundreds of years ago.

Best Foot Forward

No doubt you received a briefing concerning the care of your uniform while you were at boot camp, but just in case that period is some time behind you, you'll find here a few tips you may have forgotten.

One of the best guides is *Navy Uniform Regulations*. Here's an informal abstract of what that publication has to say concerning your uniform and appearance:

- Uniforms must be kept scrupulously clean, with devices and insignia bright and free from tarnish and corrosion.
- Hats and caps are worn squarely on the head, bottom edge horizontal.
- Keep your face clean-shaven – and if you wear a mustache and/or beard (subject to command regulations), keep them short and neatly trimmed. No eccentricity in the manner of wearing mustaches and beards is permitted.
- Make sure your hair is close-trimmed. It may be clipped at the edges of the sides and back, but it should be so trimmed as to present an evenly graduated appearance. Your hair should not be longer than three inches.
- No articles – such as pencils, pens, watch chains, fobs, pins, jewelry, handkerchiefs, combs, cigars, cigarettes, pipes, or similar items – are permitted to be worn or carried exposed upon the uniform. This restriction does not apply to cuff links, tie clasps and shirt studs. You may wear a wrist watch, identification bracelet and an inconspicuous ring.
- *Uniform Regs* also has a few remarks concerning the appearance of women. Hair must be neatly arranged. The back of the hair may touch, but may not fall below the collar. Side hair must be trimmed or arranged to show a fairly close contour. The hair should not show under the front brim of the hat. Cosmetics, if used, must be conservative and in good taste. No pencils, pens, pins, handkerchiefs, or jewelry may be worn or carried exposed upon the uniform. Earrings, hair ribbons and other hair ornaments are not permitted. A woman may wear a wrist watch, an identification bracelet and inconspicuous rings.

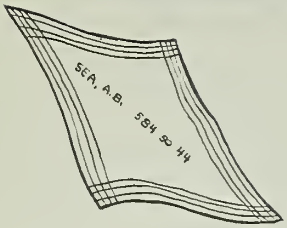
- Naval personnel are expected to provide themselves with an adequate supply of the correct uniforms, and are forbidden to possess or wear any other than the regulation uniform or insignia of their respective rank, corps or rating, or to wear decorations, medals, badges or ribbons not prescribed by regulations.
- All wearing apparel and insignia you obtain through the Navy clothing supply system are considered regulation. Clothing and insignia from other than official sources must conform in pattern, appearance and quality to those you obtain from naval sources.
- You may not transfer or exchange your uniforms without the authority of your commanding officer.
- Regulations provide that, unless directed otherwise, when on leave or liberty you may wear civilian clothing within the Western Hemisphere (including Greenland), and in United States possessions outside the Western Hemisphere.

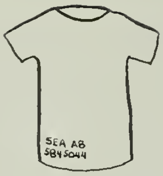
- When on leave and traveling in a foreign country you should normally wear civilian clothes. Dress and personal appearance should be appropriate to the occasion so as not to bring discredit upon the Navy.
- You are not authorized to wear any part of your uniform at the same time you wear civilian clothes, except articles such as raincoats, shoes, socks, gloves, linen and underwear, which do not present a distinct naval appearance.
- Enlisted personnel are not authorized to have civilian clothing in their possession aboard ship, but they may have such clothing on hand at naval activities ashore when authorized by their commanding officer and if stowage space is available. They may wear civilian clothes to and from shore activities when authorized by their COs.

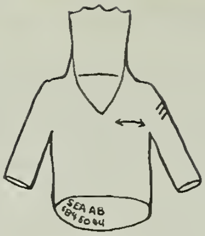
The best uniform in the world will give good service only if you give it proper care and maintenance. No matter how well-fitting a uniform is when new, especially the coat, it will not continue to look its best or keep its shape unless it is carefully put on and kept buttoned. If you carry large or heavy objects in the pockets, you will soon destroy the shape of the pockets. If space is available, uniforms should be kept on hangers; or otherwise kept neatly folded and carefully stowed.

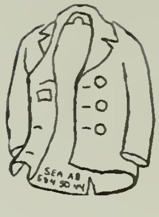
It's no accident that the present day uniform will meet space requirements provided, since it was designed after the clothing preferred by seagoing men of the U. S. Navy long before there was any required uniform. In those early days, when there was even less space than now allotted for the enlisted men's uniform, the basic outfit as we now know it, was evolved. To this day it still serves the two basic purposes for which it was designed – (1) to provide a distinctive, durable outfit for the man wearing it as a member of the U. S. Navy, and (2) to fit the stowage space aboard ship.

When the whole uniform, from socks to dress jumpers, is folded or rolled properly, it will fit into a very small personal gear locker.









NECKERCHIEF

Stencil or stamp name and service number diagonally across the center.

UNDERSHIRT

Stencil or stamp name and service number on the outside of the front, one inch from the bottom of the shirt and at right of the center.

BLUE OR WHITE JUMPERS

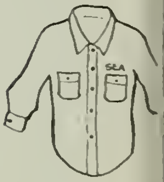
Stencil or stamp name and service number on the inside of the hem at the right of the center line of the back.

PEACOAT

Stencil or stamp name and service number on the lining, on the right side of slit of tail three inches from and parallel to the bottom.

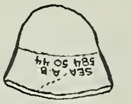
BLUE CHAM

Requires two
name and serv
and last name
above the pock



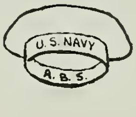
WHITE HAT

Stencil or stamp name and serial number on the brim, when the brim is turned down, close enough to the crown so that the markings will not show when the brim is turned up.



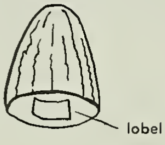
SERVICE BLUE CAP

Stencil or stamp initials only on the inside of the sweatband.



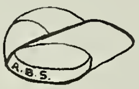
WATCH CAP

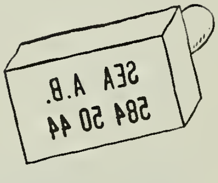
Print name and service number on label on the inside one-half inch from the bottom.



BLUE WORKING CAP

Stencil or stamp initials only on the inside of the sweatband.





HOW TO MARK

Your uniform tells your story. Wh
well you do it are all explained (at le

Take pride in it. Proper care of yo
adrift" ends up in the Lucky Bag or is
ings. *Navy Uniform Regulations* state
be legibly marked with the owner's
and service number, unless otherwise
place. ALL HANDS Magazine shows h

All markings, other than those
stencil or stamp, if available; otherwis
the word "right" or "left" appears in
the term means the man's right or left

Use black marking fluid for all
ing fluid for blue clothes and dung
provided for the purpose.

Optional items of clothing shall
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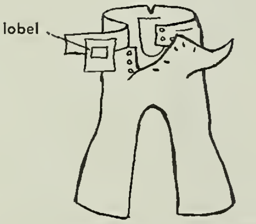
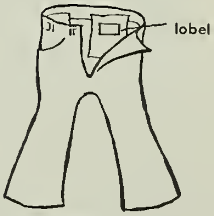
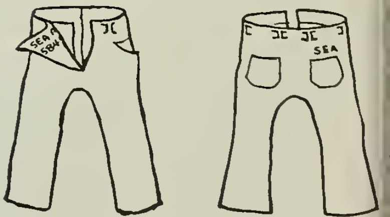
No transfer or exchange of unifo
without the authority of the comman
are authorized, or when clothing belon
owner shall be obliterated with a stam
be placed above, below or next to it.
changes.







BLUE TROUSERS

(Button-front type) Print name and service number on label on the wearer's right-hand pocket, inside the waistband.

BLUE TROUSERS

(Zipper-front type) Print name and service number on label of the back pocket piece.

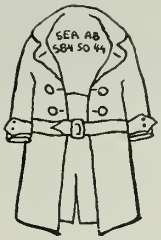
DUNGAREE TROUSERS

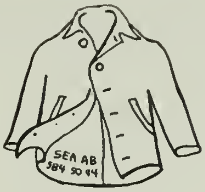
Require two markings. Stencil or stamp name and service number on the waistband, on the inside, in front, at the right of the center line; last name only goes above the right hip pocket.

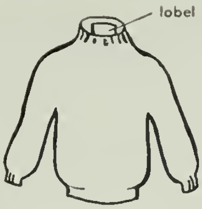
Prepared by ALL HANDS Magazine

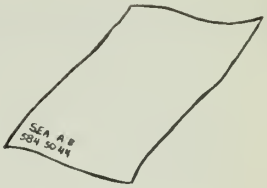
SHIRT

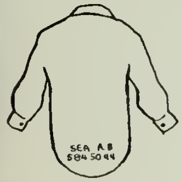
gs. Stencil or stamp
mber on the shirttail
n left front, one inch











RAINCOAT

Stencil or stamp name and service number inside on the lining, three inches below the collar seam.

BLUE WORKING JACKET

Stencil or stamp name and service number on the inside of the hem at the right of the center line of the back.

SWEATER

Print your name and service number on label on the inside, below the back of the collarette.

TOWEL

Stencil or stamp your name and service number in the left corner (as you face the towel) on the hem, parallel to the end.

UR NAVY UNIFORM

are, what you are, what you do and how
part) by your uniform.

iform will be a waste of time if your "gear
in the laundry for lack of ownership mark-
all articles of clothing and accessories must
(usually meaning last name and initials)
fied, in a particular way and in a particular
ow it is done.

bels, shall be made with a one-half-inch
h a stencil not larger than one-inch. Where
regulations (except in the case of towels),
n he is wearing the garment.

thes and chambray shirts and white mark-
ousers. Use indelible ink when labels are

arked similarly to comparable items of re-

othing of enlisted personnel shall be made
officer. When such transfers or exchanges
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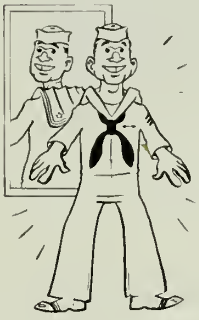
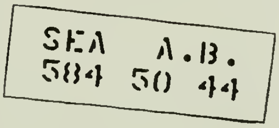
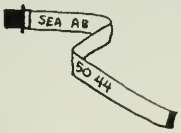
master-at-arms shall keep a record of such





GLOVES

Stencil or stamp initials only on the inside near the top.



BELTS

Stencil or stamp name and service number inside of belt.

SOCKS

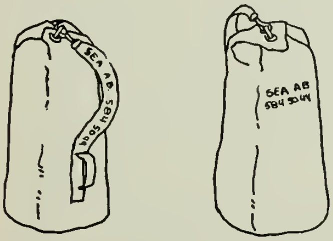
Stencil or stamp your initials only, on the foot.

SHOES

Stencil or stamp your initials only, inside near the top.

SWIM TRUNKS

Stencil or stamp name and service number inside, on hem, on right center of back.



SEA BAG

Requires two markings. Stencil or stamp name and service number along the carrying strap on the outer side, and on the opposite side from the carrying strap, around the bag, about one foot from the top.

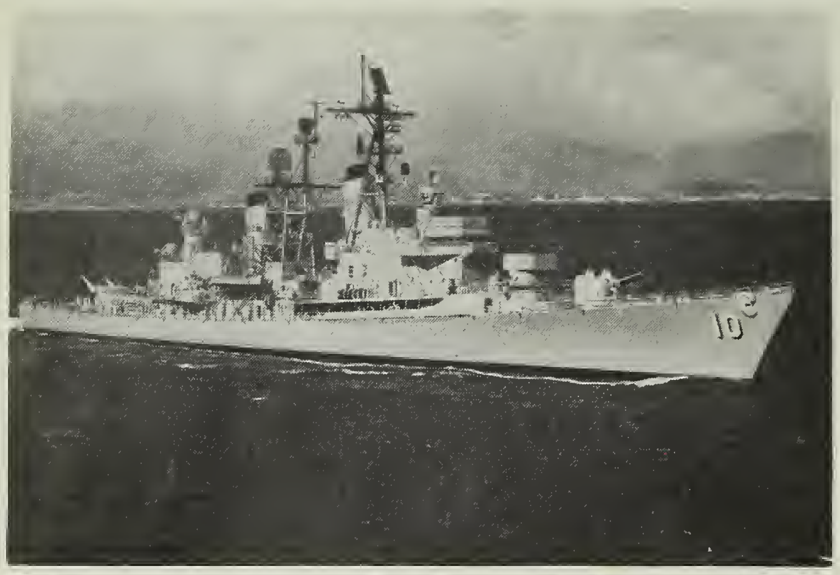
WHITE TROUSERS

Stencil or stamp name and service number on the waistband, on the inside, in front, to the right of the center line.

DRAWERS

Stencil or stamp name and service number on the outside of the right half of the waistband.

TODAY'S NAVY



STEAMING ON — *USS King* (DLG 10) carries *Terrier* missiles, antisubmarine rockets, acoustic homing torpedoes and conventional guns.

New Gray Eagle

The Navy has a new "Gray Eagle," or active duty Navyman who has been a naval aviator longer than anybody. He is RADM Frank Akers, 61, who has been wearing Navy wings since September 1925. RADM Akers received the title last January when ADM Charles R. Brown, the previous "Gray Eagle," retired.

ADM Akers has been presented with the Gray Eagle Trophy, and will retain possession of the award until he retires. It will then be passed on to the active duty aviator with the earliest Naval Aviation designator.

In addition to being "Gray Eagle," ADM Akers is the Commander, Fleet Air Alameda. His headquarters are at the Naval Air Station in Alameda, Calif.

Twenty-Nine *Polaris* Subs

The Fleet ballistic missile submarine *Thomas Jefferson* (SSBN 618) was launched in February at Newport News, Va.

Named in honor of the third President of the United States, *Thomas Jefferson* will be equipped with A-2 *Polaris* missiles having a range of 1500 miles, when she joins the fleet.

With this launching, the Navy will have six Fleet ballistic missile submarines in commission, four launched but not commissioned, and 19 building or authorized.

YESTERDAY'S NAVY

On 6 Apr 1917, the United States declared war on Germany. On 12 Apr 1861, USS *Pawnee* took part in the attempted relief of Fort Sumter, Charleston Harbor, S. C. On 20 Apr 1796, Congress authorized the President to continue the construction and equipment of two frigates of 44 guns and one of 36 guns. On 20 Apr 1861, the Norfolk Navy Yard was partially destroyed and abandoned by U. S. Naval Forces. On 22 Apr 1861, the New York Seventh and the Massachusetts Eighth Regiments were landed at Annapolis, Md. On 29 Apr 1862, New Orleans surrendered.

New *Barb* Is Launched

The nuclear-powered submarine *Barb* (SSN 596) has been launched at Pascagoula, Miss.

Bearing the name of the World War II submarine which won fame for her many successful campaigns, the new *Barb* was sponsored by the wife of Rear Admiral Eugene B. Fluckey, USN. Admiral Fluckey is a Medal of Honor winner who commanded the World War II *Barb*.

Barb is the first in a series of four *Thresher* class submarines scheduled to be built for the Navy. She is the third nuclear-powered submarine to be launched at Pascagoula. The previous two are the *Skipjack* class submarines *USS Sculpin* (SSN 590) and *USS Snook* (SSN 592).

With the launching of *Barb*, the Navy will have 15 nuclear submarines in commission, four launched but not commissioned, and 12 building or authorized, in addition to the six nuclear-powered ballistic missile submarines in commission, three launched, and 20 building or authorized.

Sailing with *Current*

After 36 days and 5792 miles, USS *Current* (ARS 22) chugged into the harbor at Pusan, Korea, looking somewhat like a tired mother with a string of recalcitrant kids in tow.

Instead of children, however, *Current* was towing five Army barges, each of which weighed 530 tons. The barges formed a line behind her 4638 feet long.

Current's Pacific odyssey began at Pearl Harbor, where her barges had been dropped by another salvage ship. Here the barges and their towing bridles were inspected, running light batteries recharged and the nuts and pins of the bridle plate shackles were welded to keep them from working loose during the long trip ahead.

When *Current* left Pearl Harbor, she headed southwest toward Guam on a route which, although 1000 miles longer than the northern route, was expected to be comparatively calm.

About 700 miles east of Guam, *Current* was refueled by USS *Cim-*

arron (AO 22). After that she churned her way toward Pagan Island where she was inspected by a boarding party while the crew photographed the active volcano on the northern end of the island.

After Pagan, there was a short detour in order to avoid a typhoon which was scheduled to cross *Current's* path with 110-knot gales. *Current* was again replenished, this time by USS *Chipola* (AO 63) and *Vega* (AF 59). Bridles and running lights were inspected for the last time.

After she delivered her charges at Pusan, tired mother *Current* picked up steam and headed for Sasebo, Japan, for two weeks at the beauty shop.

SHARP SHOOTERS—LTJG Arthur D. Wombold, USN, gunnery officer of *USS Castor* (AKS 1), points to one of three 'Es' won by his gun crews.

Yard Tour for *Gilmore*

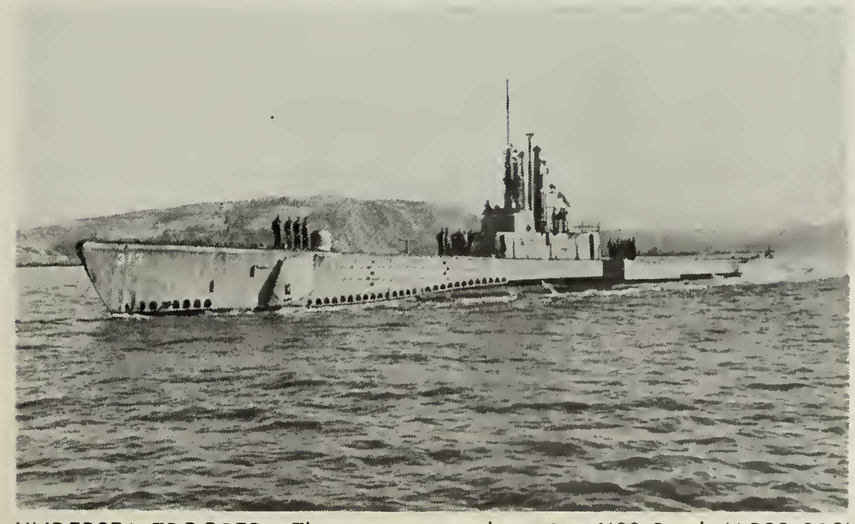
The sub tender USS *Howard W. Gilmore* (AS 16) is undergoing a five-month overhaul intended to give the 18-year old ship several more years of active service life.

Gilmore's yard tour – at the Charleston, S. C., Navy Yard – is part of the Navy's Fleet Rehabilitation and Modernization (FRAM) program. Most of the yard work will be devoted to modernizing her shops and introducing new weapon facilities and nuclear support capabilities.

Commissioned (at Mare Island, Calif.) in May 1944, *Gilmore* has been "home" to many submarines which have relied on her for service, repairs and supplies. (*Gilmore* has facilities for making any submarine repairs other than major conversion or overhaul.)

Gilmore was named in honor of the wartime commander of the submarine USS *Growler* (SS 215). (LCDR Gilmore died a hero at sea in February, 1943. During a surface engagement, his sub was strafed with machinegun fire; LCDR Gilmore lay critically wounded on the bridge. "Clear the bridge," he commanded the four others who were topside. The OOD, quartermaster and two wounded men slid down the hatch. "Take her down," LCDR Gilmore called after them, unable to make it through the hatch himself. He was awarded the Medal of Honor posthumously.)

In later stages of WW II, *Gilmore* the tender served as an advance submarine base in the Marshall and Philippine island areas. For 13 years after the war she was based at Key West, Fla., then moved to Charleston (in 1959) where she has been the flagship of COMSUBFLOT Two and COMSUBRON Four. *Gilmore* normally carries a 900-man crew.



UNDERSEA TROOPER—The transport submarine *USS Perch* (APSS 313) has rejoined the active Fleet as a unit of Submarine Flotilla One.

Perch Is Back With Fleet

The only sub awarded the Submarine Combat Patrol Insigne for action in the Korean campaign has rejoined the Navy's operating forces after two years in an inactive status.

USS *Perch* (APSS 313), which in 1950 supported a group of British commandos who destroyed a rail tunnel during a raid on the northeast coast of Korea, has been called up for service with San Diego's Submarine Flotilla One. The sub had been in a decommissioned status since January 1960.

Perch was first commissioned in 1944 as a Fleet type sub, She was constructed at Groton, Conn., and named for the *Perch* which was lost in action early in World War II.

The new *Perch* completed six WW II patrols, during which she sank a Japanese trawler and a coastal freighter, damaged a medium tanker, rescued two U. S. airmen who had been downed in enemy waters and landed Australian commandos in Indonesia.

In 1948 *Perch* was converted to a troop carrier status, which made it possible for her to accommodate 160 assault troops and equipment.

The ship's role in the September 1950 commando raid in Korea won her crew the Submarine Combat Patrol Insigne and her commanding officer (LCDR R. D. Quinn) the Bronze Star Medal.

The sub carries a crew of approximately 80 officers and enlisted men.

Radioman Served in One Army, Two Navies

Peter R. Turchi, Radioman First Class, USN, of Livorno, Italy, has seen lots of changes in the two navies in which he has served during his career.

Turchi, now 62 years old, started out in the Italian Navy in World War I. He served during that war on board the Italian ship *Victor*. His ship was torpedoed twice in 1916.

In 1918 Turchi came to the United States, joined the Army Air Corps and became a radio mechanic. After a hitch in the Air Corps, he returned to the sea — this time as a member of the U.S. Navy.

From Washington, D. C., where he enlisted, Turchi was sent to Philadelphia for classification. He hoped to go to radioman school, but when his orders arrived, they were for duty in USS *Texas* (BB 35), out of San Pedro, Calif. His CO told him: "When the Navy wants you to go to radioman school they'll send you."

On board *Texas*, Turchi worked with the deck force. He didn't keep his job long, though. One day, he was called to the office of the executive officer, who asked him if he wanted to remain on board or go to radioman school. Turchi took his school.

After completion of Radioman Class "A" School, Turchi was transferred to the submarine USS *R-7*, out of Pearl Harbor. "In those days," Turchi recalls, "there was no submarine school. To qualify for sub duty, you served in a submarine for three months, then were blindfolded and taken around the ship to perform different operations. If you did the job right, you were qualified."

Turchi also recalls the dollar-a-dive extra pay he received after completing 15 dives. This was called dungaree money.

From *R-7*, Turchi was sent to Diamond Head, Oahu, for duty at the communications center. Following this shore duty, he was assigned to the battleships USS *California* (BB 44), *Maryland* (BB 46), *West Virginia* (BB 48), *Tennessee* (BB 43) and *Colorado* (BB 45).

CAREER of Peter R. Turchi, RM1, USN, included tour of duty with Italian Navy during World War I.

Turchi made PO1 in September 1925, then left the Navy in 1928 because his wife was ill. As a civilian, Turchi worked as a machinist, but also maintained his own ham radio station. It was during his days as a ham that Turchi picked up the names "Pierre on the Air" and "Papa Pierre." These nicknames identified him to other ham operators around the world.

Turchi tried to reenlist in 1942, but was not accepted. In 1949, however, he joined the Naval Reserve Electronics Group in Natrona, Pa. Since there was neither meeting place nor equipment for the group, they used Turchi's electronic and radio equipment for training.

Sometime later the Navy sent a trailer full of radio and electronic equipment for the Reserve group. With plenty of help from Turchi, an electronics and radio center was established.

At the age of 51, Turchi was called to active duty for the Korean conflict. His first assignment was at Mustin Field, Pa. After this, he served on board various ships and duty stations. He was also an instructor at Class "A" Radioman School and a student at Class "B" Radioman School.

The Turchis now have eight children — all boys. Two of them, Francis L. Turchi, ATC, and Leonard Turchi, AD3, are also in the Navy.

Turchi gives the Navy a lot of credit. "It has given me everything I have. Before I joined the U.S. Navy I had never gone to school — not even grammar school — because I had to work. The Navy has given me an education."

Can You Beat This?

One of the top topics of conversation in the Navy today is the new Physical Fitness Program, with most comment on the subject thus far ranging (in direct ratio to the degree of physical fitness presently enjoyed) from "groan" to "great idea."

Since there is a certain amount of competition inherent in a program of this type, we expect to start receiving a flood of claims to new and/or outstanding records from the far corners of the earth most any day now.

With this thought in mind, you might be interested in the recent achievement of Naval Aviation Cadet Fred S. Kay.

Cadet Kay, a strapping, 22-year-old Texan, scored an eye-popping 87 out of a possible 88 points to smash the all-time record for the Incoming Physical Fitness Appraisal Test at the Naval School of Pre-Flight, NAS Pensacola, Fla.

Incoming cadets are tested in five separate categories — jump reach; sit-ups; speed agility; chin-ups (or pull-ups); and endurance run. Under the scoring system, a perfect 88 is achieved by:

- A jump and reach of 32 inches or more — 20 points.
- Sixty-four or more sit-ups — 20 points.
- Navigation of the speed agility course in 27.5 seconds or less — 20 points.
- Twenty or more chins — 20 points.
- Completion of a 12-minute endurance run — 8 points.

NavCad Kay, a six-foot, 165-pounder who hopes to fly jets, attained perfect ranking in four of the categories, and scored a 19 in the speed agility section (missing a perfect score by less than half a second) in racking up his massive point total.

In breaking the previous record (an 84 recorded a year ago) he toppled a standard which had withstood the assaults of more than 5600 candidates in the intervening months. Only about one-third of the incoming students manage to score more than 35 on the test.

Was former Arlington (Texas) State College student Kay satisfied with his performance? Not completely. He intends to keep right on practicing, and hopes to score a perfect 88 on the outgoing test — a mark attained by only one man in the history of the Navy Pre-Flight School.

The Whole Family Went

Because the men of *USS Swordfish* (SSN 579) had little time to spend with their families while their ship was logging 100,000 miles at sea, the Navy gave them a break by sending the crew's dependents with them to San Francisco.

The nuclear sub was due for a period of overhaul and refueling at the Mare Island shipyard. Last September, Commander, Submarine Forces Pacific, decided *Swordfish* families hadn't seen enough of each other and arranged for them to be sent from Hawaii to the West Coast on board the sub tender USS *Nereus* (AS 17).

When *Swordfish* returns to her home port in Hawaii, USS *Sperry* (AS 12) will give the dependents a return lift.

All this is, of course, very nice for the men of *Swordfish*. However, it can't compare with the break given to LT (jg) Jack Vivian on *Nereus*.

His wife, Marcia, a nurse, equal (well, almost equal) in rank to her husband, joined *Nereus'* 850-man crew to assist *Nereus'* doctors in the event any of the *Swordfish* dependents picked up a case of mal de mer or what-have-you.

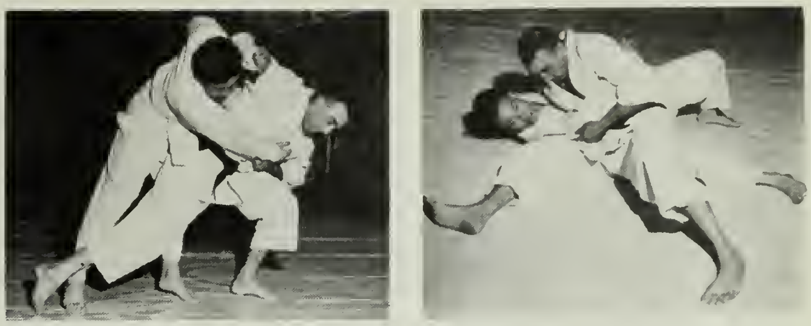
Waves in Water Colors

If an artist sitting at the seaside in front of his easel is asked what he is painting, he would probably say he is painting a seascape. Mrs. Cecile Ryden Johnson of Scarsdale, N. Y., however, would answer that she is painting the Waves.

Mrs. Johnson is the first woman to be assigned by the Navy Air Cooperation and Liaison Committee of New York's Salmagundi Club to portray Wave activities around the world. The first four of these paintings were presented to the Navy earlier this year at a club reception in New York.

The assignment will cover a two-year period. It began last December at the Officer Candidate School and the Naval War College at Newport, R. I. Appropriately enough, Mrs. Johnson's medium is water colors.

The Salmagundi Club has assisted the Navy in building its historical record for nearly two years, and has already given the Navy paintings valued at more than $150,000.



OFF WE GO—Martin L. Cress, BM1, USN, 1960 Grand Champion in the annual Far East Judo Matches, throws and pins his partner.

Navy Tugman Is Also a Judo Champ

"The public is changing its attitude toward judo as more and more people are beginning to think of it as a universal sport and not just a means of inflicting bodily harm."

This statement was made by a Navyman in a position to know what he is talking about. He is Boatswain's Mate First Class Martin L. Cress, USN, who was the 1960 Grand Champion in the annual Far East Judo Matches held at Sasebo. He is also an assistant instructor at a judo school.

Cress, who is craftmaster of YTB (large harbor tug) 518, Fleet Activities, Yokosuka, added that when he took up judo as a sport 11 years ago, "the average American parent was far from receptive to the idea of his children participating in this sport, but now things have changed considerably.

"A point that has helped to increase judo's popularity is the fact that it's almost an unlimited sport — there doesn't seem to be an age ceiling. It depends largely on the individual."

Asked what he thought were the most important benefits a person could derive from judo, Cress replied, "Judo not only helps condition the body, it also makes you think because you use split-second coordination so often."

The veteran of 19 years of naval service has other notable achievements to his credit in addition to the Far East Grand Championship. A participant in the United States-Japan Judo Tournament in 1955, Cress also captained the international team that competed against the Japanese at Yokosuka in 1956. He also trained over 100 Marine Corps military policemen in judo that same year. The veteran tug skipper is a third-degree black belt holder, which is a respectable level in world judo ranks.

Cress has also had considerable success in his present position as an assistant judo instructor at Oppama. Last year he and two of his trainees won five of 11 trophies in the Far East Judo Matches at Sasebo.

When asked about his future in judo the Navy tugman said he looked forward to many more years in the sport, and that he expected to see a lot more Navymen take it up as a result of the Navy's increased emphasis on physical fitness.

— William Polk, JO1, USN.
Photos by Ken Irelan, PH2, USN.

TWISTING — M. L. Cress flips opponent during judo practice.

SKIN DIVERS of Explosive Ordnance Disposal Unit 2 clear debris after pier fire at Charleston, S. C.

There's Nothing Dull in Daily Routine of Navy's EOD Units

Working slowly across the Gulf of Mexico, just off the coast of Florida, the crew of a small fishing boat was hauling in the final catch of the day. As the nets were pulled aboard, one of the crew spotted a badly corroded metal object nestled among the fish. On closer examination, identification of the object wasn't difficult. It was a large demolition bomb. The boat had been sailing in waters that had once served as a World War II bombing range. The ocean floor was liberally sprinkled with bombs which had failed to explode during wartime training.

Upon returning to port, the captain of the fishing boat notified police. Soon a team of divers from Explosive Ordnance Disposal Unit 2 of the Atlantic Fleet Mine Force was ordered to the area from its headquarters in Charleston, S. C., and a typical EOD team composed of graduates of the Navy's EOD School at Indian Head, Md., went to work.

Eight EODU-2 divers pitched tents and established a well-supplied camp on a remote spot of coastline, some 50 miles north of Tampa, near the danger zone. Then, for five long months they worked in 18 to 25 feet of water locating and destroying the potentially lethal bombs.

Marking off the ocean floor in small squares, they made a systematic foot by foot search. When a bomb was found it was marked with a float, and at the end of each day the bombs were exploded. This painstaking, dangerous task continued until the team was satisfied that the area was completely clear of explosives.

Mobility and experience are prime factors in the successful operation of the EOD unit. When these bomb specialists are needed, it is usually on an immediate basis. One diver recalls the day he came to work carrying his lunch and didn't get home again for 12 days. "On top of that," he added, "somebody ate my lunch while I was on the job."

Diving, while a secondary mission of the unit (the primary one is rendering safe all types of explosive ordnance), takes up a major portion of the EOD team's time. Sometimes EODU-2 teams dive to recover bodies or search for downed aircraft. They also conduct inspections of ship hulls, and have even recovered a large safe and burglar tools from a Georgia river bottom.

Made up entirely of volunteers, EODU-2 has grown from a complement of 25 men in 1961 to its present size of 67 — both officers and enlisted.

In the field, the unit's work is also varied. For example, buried in the area around Charleston are countless numbers of unexploded projectiles from the Civil War. Excavation, erosion and souvenir hunters are continually exposing these explosives. Last year a small boy found a large cannon ball on a beach. The missile was turned over to Charleston police, who in turn notified EODU-2. A team of Navy demolition experts discovered that it was live and extremely dangerous. It was filled with black powder which was dry and unstable. This is the case with most shells found in the area.

Another projectile — a large 80-pounder — was found during the excavation of a school yard in downtown Charleston. This shell had remained "buried alive" for 100 years and was more dangerous the day it was found than the day it had been dropped.

Despite the hazards of EOD, the safety record of EODU-2 is a remarkable indication of the technician's thorough training. Since the unit was activated in 1951 well over 27,000 dives have been made without a serious accident.

Diving safety is of paramount importance. "We have to plan carefully," says Chief Gunner's Mate Steve Krecelic, a member of the EODU-2 team. "We all agree on a plan of attack to a problem and then we carry it out. We don't go underwater alone. That's for the jokers on TV. One of the easiest ways to get in big trouble is to go underwater alone."

Daily training classes are held for men not working on a specific job. The training keeps them abreast of all the latest information in ordnance work. They are the experts on whom the Navy depends for all types of EOD.

— R. D. Schroth, JO3, USN.

Answer to Requisitions

The most unusual supermarkets in the Navy have opened at supply activities in Norfolk, Va.; Newport, R. I.; Great Lakes, Ill.; and Long Beach, Calif.

They accept no cash and their clientele is limited to ships and shore activities in their areas. Shoppers "buy" medical and dental supplies, hardware, repair parts or housekeeping items, using a self-service system and shopping carts to carry the items to checkstands. The items may then be delivered to the ship or activity.

Before the advent of the supermarket technique, "customers" ordered their supplies through routine requisitions, then had to await delivery. They had no immediate access to the supplies they needed, as they do under the new system.

The supermarkets have proven popular. For example, the Newport supermarket, called "Piermart," supplies 35 per cent of the total demand on the supply depot by the Fleet.

The supermarket concept is expected to be adopted by other Navy supply activities in the near future.

Northern Lights Travel Too

The Navy and Air Force have combined to sponsor research which may lead to the discovery of what produces the colorful aurora borealis in Arctic skies.

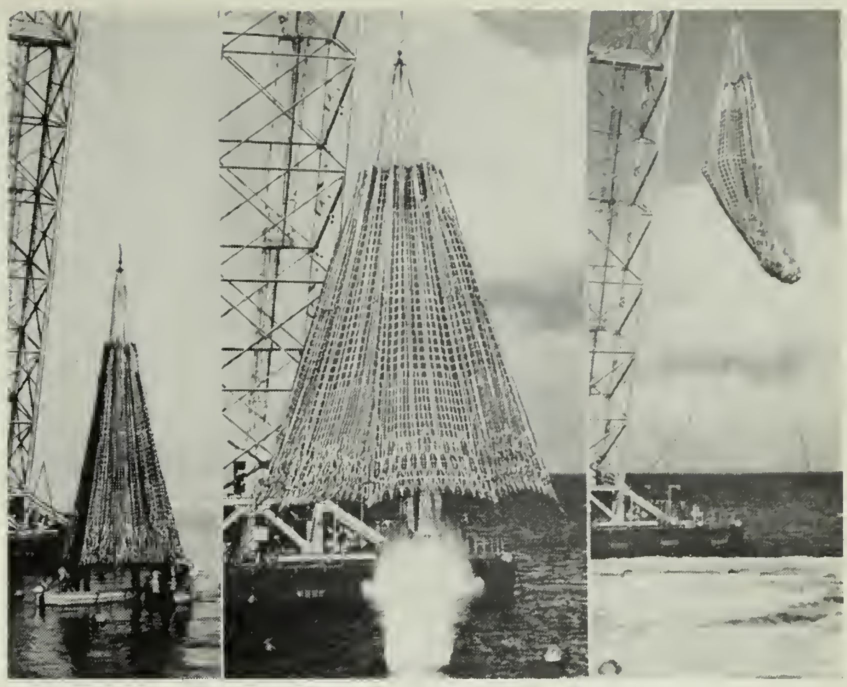
Scientists know the veils of red, green and blue light often reach a height of 250 miles and are from 200 yards to two miles thick. They also know the entire display sometimes moves as fast as 3600 miles per hour.

There are several theories to account for all this. One suggests that the northern light is produced from ionization of oxygen, nitrogen and other gases. Another, that the earth operates like a generator which, under certain conditions, accelerates charged particles into its magnetic field. Still another advances the idea that the aurora marks the places where the Van Allen radiation belt releases its particles to lower altitudes.

The Navy and Air Force expect to launch instruments in a polar-orbiting satellite which will observe the northern lights. The satellite will pass over aircraft and ground stations of the University of Alaska near Fairbanks where observations will be made and recorded.

After data have been collected, scientists hope they will know more about the arrival of electron particles from space and how energy, other than light, gets from the sun to the earth. They also may have information concerning the solar wind and the streams of high-energy particles ejected by sun explosions.

The space-borne instruments may also explain various communications phenomena such as communications blackouts during solar storms and big auroras.



NETTED — A 15-ton *Polaris* missile that was launched from the ocean's floor is retrieved in net during test off California's coast.

Lafayette Will Soon Be Here

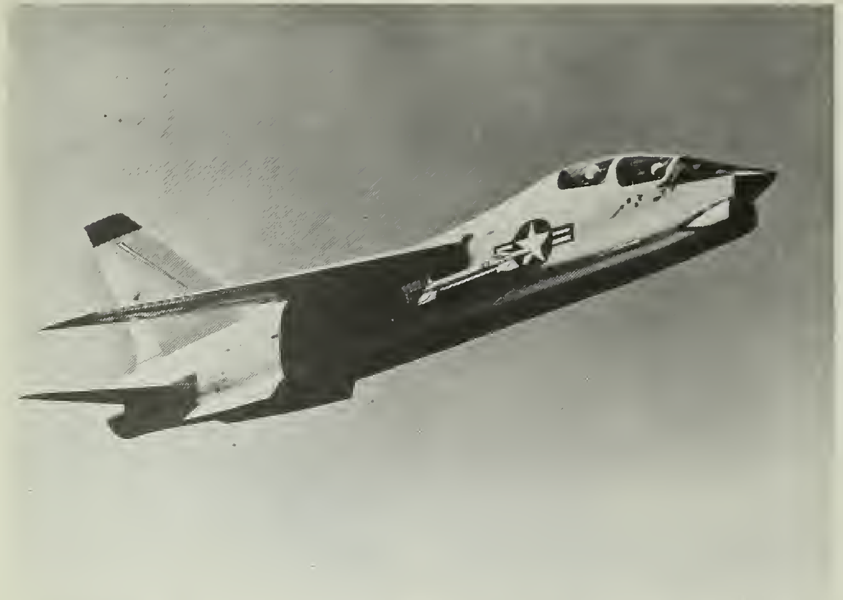
The Navy's 11th nuclear powered *Polaris* missile submarine is scheduled to be launched next month in Groton, Conn. The new sub will be designated *Lafayette* (SSBN 616).

Lafayette will be longer and heavier than the five *George Washington* and five *Ethan Allen* class SSBNs. *Lafayette* will be 425 feet in length (*George Washington* is 382 feet; *Ethan Allen*, 410 feet) and will displace 7000 tons (*vs.* 5600 tons for *George Washington;* 6900 tons for *Ethan Allen*). Two compartments not built into the previous *Polaris* subs account for the increase in size: A gym for the crew, and a combination lounge, lecture room and study hall. However, like the other SSBNs, *Lafayette* will be armed with 16 *Polaris* missiles, which can be fired while the submarine is beneath the surface of the water.

The new sub is named after the Marquis de Lafayette, the French leader who served as a general in Washington's army during the American Revolution.

Lafayette's commissioning is scheduled for April 1963. A home port for the new sub has not yet been determined.

LOCK UP—Attack cargo ship *USS Arneb* (AKA 56) is lifted 18 feet while using the Panama Canal.



CONVERTED F8U-1 — Air-brushed photo shows how Navy's F8U-1T training plane will appear when it becomes operational early this year.

Chuting Star

With the casualness of a commuter stepping from the door of a bus or train that has transported him safely to work, CWO Lewis T. Vinson, USN (Ret.), stepped into space from the specially built door in the side of a Navy R4D8 aircraft that had carried him to his job, at an altitude of 12,500 feet above the desert sands of El Centro, Calif. For Vinson's job – he has been voluntarily recalled to active duty – is that of jumpmaster for the U. S. Navy Parachute Exhibition Team, the "Chuting Stars," based at the U. S. Naval Air Station, Pensacola, Fla.

For 60 seconds after he stepped from the door, Vinson was free-falling through space at a speed in excess of 120 miles an hour. Using the knowledge and experience of a veteran jumper, he maneuvered himself into position over a specified point on the ground, so that he could land safely in the drop zone at the U. S. Naval Air Facility, El Centro.

Constantly checking the altimeter and stop watch attached to the reserve parachute on his chest, CWO Vinson calmly waited for the second hand to reach the 60-second mark before pulling the ripcord.

As the chute rippled out of his pack, Vinson readied himself for the sharp tug that, in split seconds, would slow his rate of descent from that of 120 miles an hour to a little less than 13 miles an hour. Feeling the opening shock, Vinson looked up to check his canopy for proper inflation and torn panels. When he saw that everything was in perfect condition, he settled down to the task of maneuvering his chute by use of control lines attached to either side of the opening in the rear of the canopy, in order to land on the small metal plate inserted in the desert floor in the center of the drop zone.

In the three and a half minutes it took him to descend 12,500 feet – one minute to fall the first 10,000 feet and two and a half minutes to fall the remaining 2500 feet – CWO Vinson added still another first to his already notable record. This was his 1000th recorded parachute jump, making him the only person in Navy history to attain this mark. In those 1000 jumps, Vinson has traveled some 5,364,200 feet through space – a distance nearly equal to that between Chicago and New Orleans; Los Angeles and Denver; or Washington, D. C., and Memphis.

Upon landing in the drop zone, he was congratulated by his teammates and LCDR Bruce Cobb, officer in charge of the Chuting Stars.

Vinson accomplished this feat during a training period with the Chuting Stars at the U.S. Naval Air Facility, El Centro. The team is in training in preparation for the exhibition they will give throughout the United States, starting 8 April, at the U.S. Naval Air Station, Miramar, Calif.

Vinson made his first parachute jump with the Marines at Camp Gillespie, San Diego, Calif., in 1944. Since then he has served as an instructor at the Navy's Parachute Rigger School, Lakehurst, N. J., and as Parachute Officer and Jumpmaster of the Parachute Experimental Unit, El Centro, Calif. He retired in September 1957 and in January 1961 voluntarily returned to active duty to help organize the Chuting Stars.

During his naval career, CWO Vinson made a total of 755 experimental parachute jumps for the purposes of research, development, testing and evaluation of pilot safety and survival equipment. For this he was awarded the Navy Commendation Ribbon. He was later awarded the Air Medal for a parachute jump into isolated, rugged terrain under extremely hazardous conditions of high winds to give medical aid to a downed pilot. In 1957 he was again commended, this time for his heroic action in saving the life of a crewman of a crashed helicopter in which he was a passenger.

His many achievements include testing, for the Navy, the first fully automatic ejection seat.

As a civilian, he served as a test engineer on the recovery system for the *Mercury* capsule used so successfully by CDR Alan B. Shepard, Jr., USN, CAPT Virgil Grissom, USAF, and LCOL John Glenn, USMC, in their historic flights into space. CWO Vinson was a test engineer for the rocket ejection seat for the F-106 *Delta Dart.*

CWO Vinson will remain with the Chuting Stars until the latter part of this month, then retire from the Navy for the second time.

Second Guided Missile DD

USS *Buchanan* (DDG 14), second of the Navy's growing fleet of guided missile destroyers to be built at the Puget Sound Naval Shipyard, was commissioned early in February at Bremerton, Wash.

Buchanan is named in honor of RADM Franklin Buchanan, first superintendent of the U. S. Naval Academy, who later served through the Civil War as an admiral in the Confederacy.

Weighing 4500 tons and 437 feet long, *Buchanan* carries a main battery of *Tartar* surface-to-air guided missiles, *Asroc*, six torpedo tubes and two five-inch/54 guns. She has been assigned to Cruiser-Destroyer Force, Pacific Fleet.

Destroyer *Lawrence*

The guided missile destroyer USS *Lawrence* (DDG 4) was commissioned at the Philadelphia Naval Base in January.

The 3370-ton *Lawrence* was launched in February 1960 at Camden, N. J. She is armed with *Tartar* surface-to-air guided missiles, *Asroc* and a 5-inch/54 gun battery.

The new DDG was named for CAPT James Lawrence whose dying words, "Don't give up the ship," have been remembered by Navymen since 1813.

Lawrence entered the Navy as a midshipman in September 1799 and saw his first service in the frigates *Ganges* and *Adams*.

During the war with Tripoli (1801-05), he served as First Lieutenant and later as commander of *Enterprise*, First Lieutenant of *John Adams* and Commander of Gunboat No. 6.

Lawrence established a reputation for gallantry during the attack on Tripoli in June 1803 and in the burning of the captured United States frigate *Philadelphia* in February 1804.

Lawrence was second in command of 84 volunteers who sailed into the harbor of Tripoli on board a captured ketch renamed *Intrepid*. There was some moonlight as the ketch entered the harbor with most of her volunteers concealed. A few men, dressed as Maltese seamen, were on deck.

Intrepid was within 100 yards of *Philadelphia* before being warned away. A man on *Intrepid's* deck called out that the ketch was from Malta; that she had lost her anchors – and requested permission to moor alongside *Philadelphia*. The Tripolitans aboard *Philadelphia* not only granted permission but assisted in the operation.

It wasn't until the little ketch was alongside *Philadelphia* that the alarm was given in the captured frigate.

The Tripolitans were surprised and confused when the attack came and about 20, who offered resistance, were killed. The remainder, except for one prisoner, jumped over the side and swam ashore.

After the lower decks were cleared, combustibles were passed from *Intrepid*, placed at prearranged points aboard *Philadelphia* and set on fire.

OFF TO SEA—*USS Lawrence* (DDG 4) heads to sea. She was named for the captain who said, 'Don't give up the ship,' in War of 1812.

Intrepid escaped from alongside the burning *Philadelphia* only to find herself under the guns of Tripoli's alerted harbor defenses. Despite her almost impossible situation, she escaped practically unharmed.

After the war with Tripoli, Lawrence served in *Constitution* and commanded *Vixen*, *Wasp*, *Argus*, and *Hornet*. He was promoted to the rank of Master Commandant in December 1811. *Hornet*, under his command, was the last ship to bring dispatches from England before the declaration of war in June 1812.

Three days after *Hornet* returned to the United States, she joined Commodore John Rogers and captured three of seven prizes taken by his squadron.

Two of Lawrence's more notable successes during the War of 1812 were his capture of the British brig *Resolution* off Brazil and his defeat of the brig *Peacock* which *Hornet* engaged off British Guiana and forced to surrender about 15 minutes after the first shot was fired.

SEA DUTY — CAPT James Lawrence's name has been carried to sea again by a sleek new DLG.

When Lawrence returned to the United States, in late March 1813, he found he had been promoted to Captain earlier in the month. Two months later, he took command of the frigate *Chesapeake* in Boston Harbor. Soon after, despite having an inexperienced crew, *Chesapeake* engaged the British frigate *Shannon* and, in a furious engagement during which broadsides were fired at pistol shot range, *Chesapeake* fouled her mizzen rigging with *Shannon's* forechains and was helpless before *Shannon's* raking fire.

Lawrence, although mortally wounded, kept urging his men to "Fight her 'til she sinks" and not to give up the ship, thereby lessening somewhat the demoralization which seized the inexperienced crew under adverse conditions.

Lawrence died at sea on 5 June 1813 and was buried with respectful honors by his erstwhile enemies at Halifax, Nova Scotia. Later his body was brought to the U.S.

Constellation Heads for Pacific

The new attack carrier USS *Constellation* (CVA 64) will be homeported at San Diego sometime during July of this year. Her home port while undergoing shakedown training with the Atlantic Fleet was New York City.

USS *Lexington* (CVA 16), now a part of the Pacific Fleet, will be transferred to the Atlantic Fleet later in the summer. She will be redesignated a CVS and will relieve USS *Antietam* (CVS 36) which is currently scheduled for inactivation.

THE WORD

Frank, Authentic Advance Information On Policy — Straight From Headquarters

• **SURFACE SHIP NUCLEAR TRAINING** — Applications are needed for Surface Nuclear Propulsion Training from men in pay grades E-3 through E-6 of the MM, BT, EM, IC and ET ratings. Particularly desired are career-minded young machinists mates, as nearly half of the billets are for men in this rating.

Currently there are just enough qualified surface nuclear power plant operators to fill existing billets. Until recently, there were enough requests for nuclear training arriving regularly in BuPers to insure all billets could be kept filled. In the past few months the number of applications received has not been sufficient. Thirty per cent of the billets for surface nuclear power plant operators are shore billets as instructors. Seventy per cent of the billets are at sea in USS *Enterprise* (CVAN 65), USS *Long Beach* (CGN 9) and USS *Bainbridge* (DLGN 25). A second DLGN was approved in the shipbuilding program for fiscal year 1962.

The training program consists of six months in the Basic Nuclear Power Course, followed by six months of operational training at a shore-based prototype. The basic course convenes quarterly at the Submarine Base, New London, Groton, Conn., and at Mare Island Naval Shipyard, Vallejo, Calif. Surface ship prototype plants are located at Idaho Falls, Idaho, and Schenectady, N. Y.

Applicants must meet the eligibility requirements given in Chapter 11, *Enlisted Transfer Manual* (NavPers 15909A), Memorandum Correction No. 4. No waivers may be granted. Requests should be submitted on the Enlisted Evaluation Report (NavPers 1339), via your commanding officer, direct to the Chief of Naval Personnel (Attn Pers-B2131).

• **MORE CHOICE OF TOUR LENGTH** — An experimental recruiting program now in effect throughout the Navy cuts the minimum enlistment period for new recruits from four to three years, and permits men who have been released for more than three months to reenlist for either two, three, four or six years. In the past, enlistments and reenlistments had to be for either four or six years.

The three-year enlistment procedure does not do away with four- and six-year contracts. New recruits can take their pick. But, recruits who chose a three-year hitch will not be offered "A" school training, as is the case with many qualified four- or six-year enlistees.

The new program is being tried on an experimental basis until 30 Jun 1962.

Word of the experimental recruiting standards has been distributed to the Fleet in the form of Recruiting Services Notice 5-62, which is dated 8 Jan 1962.

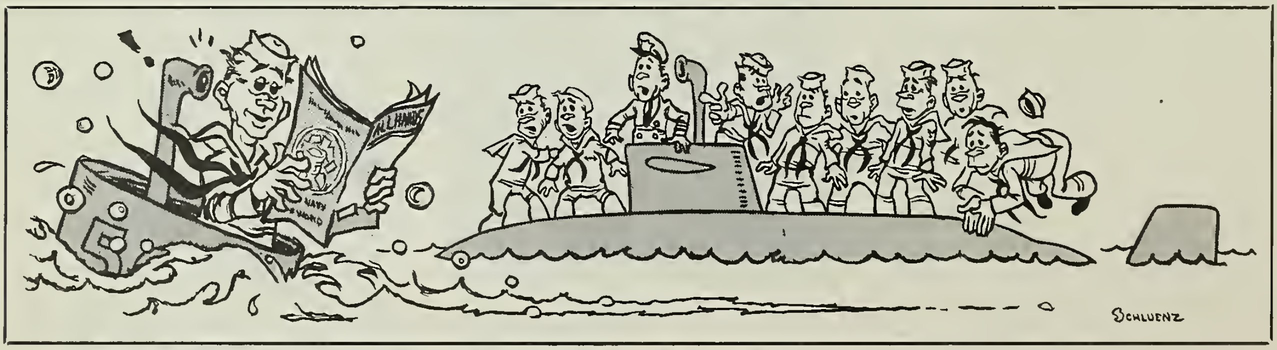
• **INCENTIVE FOR RESERVISTS** — Reservists called to active duty under provisions of Public Law 87-117 are being encouraged to reenlist in the Regular Navy. As an incentive, the Navy has compiled a special list of "open" rates which assures excellent advancement opportunities for Reservists of the same rates who ship Regular. These open rates are:

SR, SA, SN
FR, FA, FN
AR, AA, AN
ADJ3, 2, 1, C
ADR3, 2
AT3, 2, 1, C
AO3, 2, 1
AG3
AQ3, 2, 1
AC3, 2
AB3, 2
AE3, 2
AM3, 2
PR3, 2, 1
AK3, 2
PH3, 2
PT3
BM3
QM3, 2, 1
SM3, 2
RD3, 2, 1
SO3, 2, 1, C
TM3, 2
GM3
GS3, 2, 1, C
GMT3, 2, 1, C
ET3, 2, 1, C
IM3
RM3 2, 1
CT3, 2
YN3
PN3
SK3
DK3
PC3
CS3
SH3
MM3, 2, 1, C
MR3, 2, 1
EN3, 2
BT3, 2
BR1, C
EM3, 2, 1, C
IC3, 2, 1
SF3
DC3, 2
CE3, 2, 1
BU3, 2, 1
SW3, 2, 1

The expanded list was first announced in BuPers Notice 1130 (18 Jan 1962). It modifies the list of open rates contained in BuPers Inst. 1130.4F, which is the official guide for the enlistment in the Regular Navy of active-duty Reservists. The new listing applies to all Reservists recalled between 1 Aug 1961 and 30 Jun 1962.

• **ALL-NAVY CARTOON CONTEST** — Here's an up-to-date reminder to those who would bid for fame and trophies in the 1962 All-Navy Cartoon Contest — the time grows shorter. Your entry or entries must be in the hands of the Chief of Naval Personnel (Attn: Pers G-11) no later than 1 Jun 1962.

Complete details on this seventh annual carnival of yuks can be



DON'T BE ALL WET — Nine others are waiting to get in the swim. Pass this copy of ALL HANDS along.

found in the February 1962 issue of ALL HANDS. Briefly, all naval personnel and their dependents are eligible to enter; cartoons must be original and contain a Navy theme or background, and must be suitable for general use. The five top choices will receive trophies from BuPers, and all winning entries will be published in ALL HANDS.

• ONE DAY MORE — An extra day has been granted Navymen (and other taxpayers) filing their federal income tax returns.

Since the usual date for filing, 15 April, falls on a Sunday this year, the Internal Revenue Service has readjusted the deadline to fit the circumstances. Returns must be postmarked (this year only) by midnight 16 April.

• SHORT-TERM EXTENSIONS—It is now possible for enlisted personnel serving on active duty to extend their enlistments for periods of one or more months. There are, however, certain restrictions involved.

You may, if qualified for reenlistment, extend for one month (or any number of whole months up to one year), provided the total of all extensions of a single enlistment does not exceed four years.

Because of the many new programs being introduced, it has been found that in various instances it would be to the advantage of both the Navy and the Navyman to authorize extensions of less than a year.

Normally, only one extension for less than a year will be permitted during any single enlistment, except in those cases where you wish to obligate yourself to complete a cruise. In other cases, your request to complete a second extension of less than a year will be forwarded to the Chief of Naval Personnel for further consideration.

You will not be permitted to extend for less than a year if you have less than six months remaining on your present enlistment contract, except to complete a cruise. At present it is not planned to grant any waivers on this provision.

You will not be permitted to extend for less than a year when the obvious purpose of the extension is evasion of the provisions of Chapter 7, *Enlisted Transfer Manual*, which governs rotation to sea duty.

Normally, the extension of enlistment for less than a year will be accomplished by executing the Agreement to Extend Enlistment (service record page 1A), in accordance with the procedure described in Art. C-1407, *BuPers Manual*. If further obligated service in addition to one year and less than two years is required, and you do not wish to extend your enlistment for two full years, you may execute an extension of enlistment for one year and an additional extension of enlistment for a specific number of months — such as one, two, three, nine or 11 months.

Authority for the action is contained in BuPers Inst. 1133.15.

• SHORE TOUR LENGTHS UPPED — Navymen in a total of 19 separate rates will be spending longer tours ashore in the future as a result of a recent change in their normal shore tour lengths.

The lengthened tours, outlined in BuPers Notice 1306, of 2 Feb 1962, are the result of an analysis of sea/shore billet ratios, predicted requirements, personnel strength and other factors bearing on sea/shore rotation. Tours for six of the 19 rates —PNC, JOC, DTC, DMC, DM1 and DM2 — are being extended to 54 months, a departure from previous policy which has limited maximum shore tour lengths to four years.

The new tour lengths will be effective for most Navymen in the 19 rates concerned whose normal shore tours expire on and after 1 Oct 1962. Some exceptions will be required to maintain the necessary personnel flow to Class B schools.

If you have already been reported on Shorvey, and your tour is extended by this directive, a speedletter report will be forwarded to the Bureau and the appropriate EPDO giving your new shore tour completion date and referencing BuPers Notice 1306.

The changes:

Rate	Old Tour	New Tour	Rate	Old Tour	New Tour
PNC	48	54	AG3	24	30
DKC	36	42	HMC, 1	42	48
JOC	48	54	HM2	36	42
DMC, 1, 2	48	54	HM3	24	36
BRC	24	30	DTC	48	54
EAC	24	30	DT2	30	36
ADJC, 1	36	42	DTR	30	36
AE3	24	30			

Changes which reflect the new tours are being written for various official publications.

HERE'S YOUR NAVY

Scientists working on Navy contracts of BuWeps and the Office of Naval Research apparently got tired of hearing people talk about the weather without doing anything about it.

Perhaps even they have little intention of immediately trying to alter it, but at least they have made an attempt to find out what makes it tick.

Borrowing an idea from Ben Franklin, scientists strung six miles of fine wire between Mt. Withington—about 50 miles southwest of Socorro, N. Mex.—and a number of other peaks in the vicinity. The site was chosen because a stationary thunderstorm forms in the area nearly every day during the thunderstorm season.

One of the ideas behind this effort was to find out what makes rain fall. Scientists who conducted the Mt. Withington experiments sought to lay the groundwork for a better understanding of why precipitation precipitates.

Theories on how electrical charges are accumulated were also tested.

One theory holds that electrification of the atmosphere precedes precipitation. Several others, that the rain separates the charge that causes lightning.

Scientists probed these mysteries by sending aloft into clouds measuring equipment suspended from captive balloons.

Possibly with a subconscious desire to impress the local Indian rainmakers, the scientists also went to work on bringing lightning bolts down to a predetermined spot.

In order to accomplish this neat little trick they fired missiles propelled by compressed carbon dioxide and acetone or, in some cases, by black powder charges from old brass cannons formerly used by the Coast Guard in rescue operations.

By firing the rockets, trailing wire, to a height of approximately 1500 feet, the scientists will be able to analyze the resulting strokes of lightning carried back to instruments on the ground. This was hitherto impossible because, as everyone knows, lightning never strikes twice in the same place.

Scientists also hope their added knowledge will aid them in forecasting storms and weather conditions.

Roundup on Social Security Benefits for You and Your Family

When you reach the age of 62, your retirement pay may jump $100 or more a month. However, the extra money is not "free," and it will not be the result of a pay raise. You'll get it because you have contributed a portion of your pay each month to Social Security.

Navymen have been contributing to this plan since January 1957, and they will continue to do so as long as they're in the Navy (and later, if they work in post-retirement occupations covered by Social Security).

In return, Social Security provides many benefits to those covered. These include:

- Monthly payments to you and your dependents when you reach the Social Security retirement age of 65 (or if you choose to take a lesser amount, at age 62) and payments to your wife when she reaches retirement age.
- Monthly payments to you and your dependents, regardless of your age, if you become so severely disabled that you cannot do any substantial work.
- Monthly payments to your dependent survivors when you die.
- Lump-sum death payments to your widow (or widower) or toward your burial expenses.

Members of the armed forces have been covered by Social Security, the same as individuals in civilian employment, since 1 Jan 1957, under the Servicemen's and Veterans' Survivor Benefits Act of 1956. As a result, you receive Social Security wage credits for your active duty base pay, and your share of the Social Security tax is deducted from your base pay. The government, as your employer, pays a matching amount as its share of the Social Security tax.

You now pay three and one-eighth per cent of the first $4800 of your active duty base pay to Social Security. The amount of tax is scheduled to increase gradually until 1968, when it will be four and five-eighths per cent of your base pay.

Before we continue to discuss Social Security and how it affects you, let's look at a few of the terms used in the program. The explanations should help you to understand it better.

- *Covered employment* — This is work (including self-employment) that is covered under the Social Security Act. Service in the armed forces has been covered employment since 1957.
- *Eligible member* — This is an individual who works in covered employment for a *sufficient period* of time to qualify himself or his family for benefits under the program. (Sufficient periods are explained later.)
- *Quarter of coverage* — This is a three-month period beginning 1 January, 1 April, 1 July or 1 October of each calendar year in which you are paid $50 or more in wages, or are credited with $100 in self-employment net earnings.
- *Fully insured status* — When you have the required quarters of coverage (generally 40) to qualify yourself or your survivors for benefits, you are fully covered.
- *Wage credits*—These are wages credited to your earnings record for Social Security-covered employment. (This includes the free wage credits granted to certain military personnel. These gratuitous wage credits are not actually listed on your wage record until an application is made for benefits.)

"I don't care how much it impresses the girls—that rating badge has to come off."

Wage credits received for your Navy service, credits earned in civilian employment (if covered by Social Security) or a combination of both may be used to establish your total Social Security credits. If you are making a career of the Navy, you will be eligible for Social Security benefits in addition to your retirement or retainer pay.

Although you did not earn Social Security wage credits for your active duty base pay before 1 Jan 1957, the Social Security Administration has granted free credits of $160 a month for any active duty between 16 Sep 1940 and 31 Dec 1956, provided certain conditions are met.

To qualify for monthly retirement benefits at age 65, or in a lesser amount at age 62, you must have a certain number of quarters of coverage. If you become 65 (62 for women) or die or become disabled before you reach age 65 (62 for women), during the year listed below, you will need the quarters of coverage listed to be fully insured under Social Security:

Year	Quarters Needed	Year	Quarters Needed
1961	10	1976	25
1962	11	1977	26
1963	12	1978	27
1964	13	1979	28
1965	14	1980	29
1966	15	1981	30
1967	16	1982	31
1968	17	1983	32
1969	18	1984	33
1970	19	1985	34
1971	20	1986	35
1972	21	1987	36
1973	22	1988	37
1974	23	1989	38
1975	24	1990	39
		1991 or after	40

As a general rule, you will be fully insured when you have 40 quarters of coverage. You or your survivors cannot qualify for Social Security benefits of any kind, however, if you have less than six quarters of coverage.

You are considered currently insured when you have six (or more) quarters of coverage during the 13-quarter period ending with the quarter in which you die or become disabled, or in which you become entitled to disability or old-age insurance benefit. If, however, you die while on active duty and are not fully or currently insured (for example, if you have paid into Social Security less than six quarters), your survivors who are otherwise eligible to receive Social Security benefits will receive a special benefit from the Veterans Administration equal to the amount of the Social Security benefit that could have been paid, had you been insured by Social Security.

Both you and your family can benefit from the money you pay each month into Social Security.

Before you can collect from your own investment, you must be at least 62 years old, or disabled. If you are unable to work because of a disability, and this disability has existed for six months or more, you may draw disability benefits, providing you are both fully insured and have 20 quarters of coverage out of the 40-quarter period ending with the quarter in which you became disabled.

Retirement benefits from Social Security generally begin at age 65. You may, however, provided you have earned the required number of quarters of coverage, begin to receive reduced Social Security benefits at age 62. The amount of reduction depends on your age the first of the month for which you elect to receive benefits. Once you choose to receive reduced benefits, these will continue in a reduced amount, even after you reach age 65. By accepting the benefits at the earlier age (between 62 and 65), however, you will be ahead financially for about 15 years.

Even though you choose to receive benefits at an earlier age and in a lesser amount, your dependents (children, wife, or in the case of death, your children, widow, widower or parents) will receive their regular benefits. These will not be affected by your choice.

In addition to your Social Security retirement or disability benefits, your wife may also receive full benefits (one-half your unreduced benefit) at age 65. If she has in her care a dependent child entitled to child's benefits, or if she is between the ages of 62 and 65 and has no such entitled child in her care, she can receive benefits in a reduced amount at age 62. (The maximum reduction is 25 percent at age 62, with a graduated scale for each month under 65.)

Here again, if she chooses to receive benefits before she is 65, the benefits will not be increased to the full amount when she does reach that age. As with your benefits, if your wife takes the reduced benefits at any age before 65, she would be ahead financially for about the first 12 years. If you die while your wife is receiving a reduced payment, she would, at that time, be entitled to the full widow's benefit.

When you turn 62, if your wife is a currently insured member receiving Social Security retirement or disability benefits, and she has been furnishing at least one-half of your support (and you can prove it), you can receive husband's benefits. These are the same as a widow's benefits.

If you are receiving Social Security retirement or disability benefits when you die, your dependent and unmarried child (or children) under the age of 18 (or older if he or she was disabled before turning 18) is eligible for a child's benefit of one-half of the amount of your unreduced benefit. If you are insured, but not drawing benefits from Social

HOW DID IT START

Radar

Everyone, from the youngster who flies his model airplane through the living room to his father who comes home in a bad humor because he was caught in a speed trap, knows about radar.

However, both the child and his father—and plenty of other people—probably think radar was born amid the scientific development necessitated by World War II.

Actually, the basic principle behind radar was proven as far back as 1886 by Heinrich Hertz, the discoverer of radio waves.

In 1904, a German engineer was granted patents in several countries on a proposed way to use the radar principle aboard ships as a navigational aid and obstacle detector.

The Navy has played a large part in the development of radar as we know it today. Three Navy scientists, Dr. Albert Hoyt Taylor and Mr. Leo C. Young of the Naval Aircraft Radio Laboratory and Dr. R. M. Page of the Naval Research Laboratory were among its foremost pioneers.

Taylor and Young were testing plane-to-ground communications in the short-wave bands at Washington, D. C., when they noticed that ships moving in the Potomac River distorted the pattern of radio waves, causing a phase shift or fluctuating signal. Up to that time, scientists had not known radio waves could be reflected from small moving objects.

Dr. Page was one of the leaders in the research which followed this discovery, and many of the early radar patent applications were filed in his name.

By 1932, Navy scientists were able to detect planes 50 miles from their transmitter, and by March of the following year NRL had made enough progress to outline in detail the theoretical military applications of radar.

Congress picked up the ball in 1935 by appropriating $100,000 specifically for radio detection work.

In June 1936, plans were made for the installation of a complete set of radar equipment aboard ship. As a result, the old four-stacker, *USS Leary* (DD 158), had the distinction of carrying the first seagoing radar, which was tested successfully in 1937.

When the United States entered the war in 1941 additional shipboard sets had been produced and installed, and were operating in the Fleet as a result of these accomplishments.

Security when you die, your children under 18 can get 75 per cent of your unreduced benefits.

Your unremarried widow, provided you are an insured member, is eligible for widow's benefits at age 62, or for mother's benefits if she has one of your children in her care. The widow's benefit is 82 and one-half per cent of your unreduced benefit, and the mother's benefit is 75 per cent of your unreduced benefit. You must be fully insured at the time of your death for your wife to get widow's benefits, but mother's benefits are payable if you are either fully or currently insured.

If you are fully insured and survived by one parent, who has been receiving at least one-half of his or her support from you, he or she is eligible for parent's benefits at age 62. He will, however, be required to file proof of the receipt of such support within a certain time limit (generally two years after your death). If only one parent is entitled to benefits, he or she may receive 82 and one-half per cent of your unreduced benefit. If both parents are living, and dependent on you for support, each may receive 75 per cent of your unreduced benefit. (All family benefits described above are subject to a family maximum, as shown in the accompanying table.)

Should you become totally disabled, you may apply to the Social Security Administration for disability benefits. To qualify, however, you must be fully insured and, in addition, have Social Security credit for five years' work (20 quarters of coverage) out of the 10-year period ending immediately before you become disabled. Your wife and children may also receive benefits in this case.

All-Navy Cartoon Contest
Charley Wise, HMCA, USN

"For Pete's sake! We've had chicken twice this week already!"

The amount of Social Security benefit payments for which you or your dependents and survivors are eligible is determined by your average monthly earnings. The exact amounts of these payments can be determined only after an application has been made to the Social Security Administration. You can determine approximate amounts by using the accompanying table. Before you can use the table, however, you must first determine your average wage.

Under current law, the period of time over which average earnings are figured may start with 1 Jan 1937 (beginning of the Social Security program), or with 1 Jan 1951. Most Navymen use average monthly earnings from 1 Jan 1951. However, before you can qualify for this computation, you must have earned at least six quarters of coverage after 31 Dec 1950. Although your earnings before January 1951 may not be used in the computation of average earnings (when figured from 1 Jan 1951), the quarters of coverage earned before 1951 may still be used to qualify you for benefits. The Social Security Administration will determine the amount of benefits, using a method most advantageous to you. The following shows the usual method of computation, with 1951 as a starting point:

- *First* — List your earnings covered by Social Security for each year beginning with 1951, up to the present. If you are not now 65, include your expected earnings from now until you reach that age. Include any free wage credits of $160 per month for the period 1 Jan 1951 to 31 Dec 1956. Do not use earnings (including the free wage credits) of more than $3600 a year from 1951-54, $4200 a year from 1955-58, or $4800 a year for 1959 and thereafter.
- *Second* — Count the number of years after 1955, and up to, but not including, the year you reach 65 (62 if you are a woman).
- *Third* — From the list you made of all earnings, select those years in which your earnings are highest. The number of years of highest earnings to be counted here should be equal to the number you obtained in step two (must be at least five years). The years selected may occur either before or after you reach 65 (62 for women).
- *Fourth* — Total the earnings you have in your selected years. Divide this by the number of years obtained in step two. You now have your average yearly earnings. The

SOME EXAMPLES OF MONTHLY PAYMENTS UNDER SOCIAL SECURITY

	AVERAGE YEARLY EARNINGS AFTER 1950				
SITUATION	$800 or less	$1800	$3000	$4200	$4800
Retirement at 62	$32.00	$58.40	$76.00	$92.80	$101.60
Retirement at 63	34.70	63.30	82.40	100.60	110.10
Retirement at 64	37.40	68.20	88.70	108.30	118.60
Retirement at 65	40.00	73.00	95.00	116.00	127.00
Wife's benefit at 62	15.00	27.40	35.70	43.50	47.70
Wife's benefit at 63	16.70	30.50	39.80	48.40	53.00
Wife's benefit at 64	18.40	33.50	43.60	53.20	58.30
Wife's benefit at 65 or with child in her care, or child of living worker	20.00	36.50	47.50	58.00	63.50
Widow 62 or over	40.00	60.30	78.40	95.70	104.80
Widow under 62 and one child	60.00	109.60	142.60	174.00	190.60
Widow under 62 and two children	60.00	120.00	202.40	254.00	254.00
One surviving child	40.00	54.80	71.30	87.00	95.30
Two surviving children	60.00	109.60	142.60	174.00	190.60
Maximum for one family	60.00	120.00	202.40	254.00	254.00
Lump-sum death payment	120.00	219.00	255.00	255.00	255.00

accompanying table shows about what your approximate benefits will be.

If you die, or qualify for a period of disability under Social Security, before you reach age 65 (62 for women), your average earnings will be figured as if you become 65 (62 for women) in the year in which you die or in which your period of disability starts.

To show how this works, let's look at a couple of typical cases. Let's say, for example, that you were born on 1 Jan 1933, you have been on active duty since 1 Jan 1953, your basic pay is $150 a month and you have a wife and one child.

You began to pay Social Security tax in January 1957. Since that time you have paid Social Security tax each month. For the period from 1 Jan 1953 through 31 Dec 1956 (16 quarters) you would be credited with free military wage credits of $160 a month.

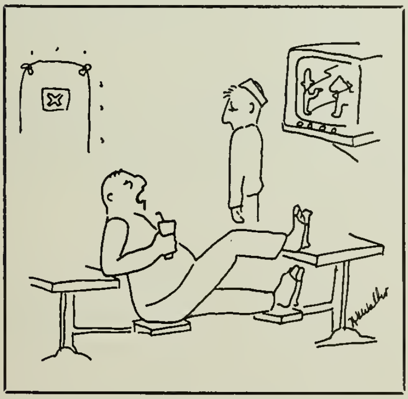
In addition to providing income at age 65, if you should die before your child is 18, your wife would draw $112.60 a month until the child reaches age 18. At that time the benefits would stop. Your wife would become eligible for a widow's benefit of about $61 a month at age 62, however.

If (in another example) you were born on 30 Sep 1910, and have been on continuous active duty (for Social Security purposes) since 1 Jan 1951, and will remain on active duty until 1 Jul 1964, here's your story.

You will receive free Social Security credits of $160 a month for the period 1 Jan 1951 through 31 Dec 1956 (24 quarters), and will have paid credits from 1 Jan 1957 to 1 Jul 1964 (30 quarters). Since this would be a combination of more than 40 quarters, you would be fully insured. We will assume, for this example, that you made $400 a month ($4800 a year) between 1957 and 1964, and that you will not work in Social Security-covered employment from your retirement until 1975, when you turn 65. Your Social Security retirement benefits would be computed as follows:

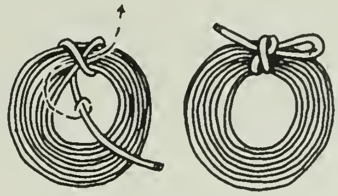
Year	Social Security Maximum Per Year	Earnings Covered by Social Security
1951-1956	$3600 (free credit)	$1920 per year or $11,520 for 6 years.
1957-1958	$4200 (paid in credits)	$8400 for 2 years.
1959-1963	$4800 (paid in credits)	$24,000 for 5 years.
1964 (first half)	$4800 (paid in credits)	$2400 for one-half year.
1964 (last half)	....	0 for one-half year.
1965-1975	$4800	0 for 10 years.
	Total:	$46,320 for 24 years.

All-Navy Cartoon Contest
ENS H.G. Walker, USN



"You don't think I'd be aboard if I didn't have the duty do you?"

Grains of Salt —



SECURING A COIL OF LINE FOR ACTIVE STORAGE

The years from 1955 until (but not including) 1975, when you will turn 65, are your 19 years of best earnings. This is an average of 19 years of $2439 a year. If you are not married, you would draw $85 a month, or if married, and your wife is 62, $116.90 a month. This would be a little less if you begin to draw benefits at age 62.

Once you start to draw Social Security retirement, you are allowed to work, and to earn up to $1200 a year, and still receive all your Social Security benefits. If you earn more than $1200, one dollar will be deducted from your individual or family benefits for each two dollars earned up to $1700, and above $1700 your benefits will be deducted on a dollar-for-dollar basis. However, if you are 72 or older, there is no limit on the amount you may earn.

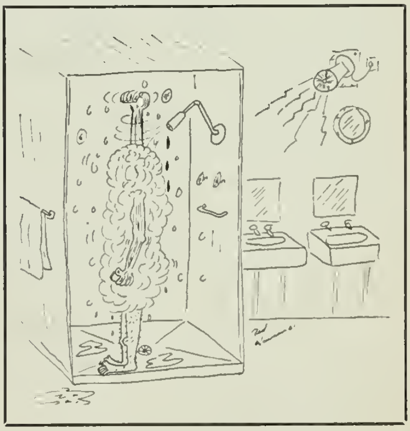
Regardless of your total earnings for a year, you can still draw benefits for any month in which you neither earned wages of more than $100 nor performed substantial services in self-employment.

You do not get Social Security benefits automatically. You or your survivors must apply for monthly retirement benefits, disability benefits, survivor benefits or the lump-sum death payment. The application should be filed as soon as the eligibility requirements have been met, because the number of retroactive payments is limited.

Full information on the Social Security program may be found in the Social Security Administration pamphlet, *Social Security for Servicemen and Veterans,* now being distributed on the basis of one copy per ten men. Interested individuals and counselors (normally Benefits and Insurance Officers) are encouraged to check with the local Social Security offices in most large cities.

Overseas commands may write the Social Security Administration, Bureau of Old Age and Survivors Insurance, Division of Claims Policy, Baltimore 35, Md., for additional pamphlets covering specialized problems, and for advice.

All-Navy Cartoon Contest
P.A. Hansen, EN2, USN



". . . and therefore water hours will be effective immediately!"

Naval War College Offers Revised Extension Course Program

I would like to direct the attention of all officers to the following report. Although the technically trained naval officer plays an ever-increasing role in the naval service, we must never forget that the plans made by staffs in consideration of the strategic, logistic and international relations factors are important criteria for the success or failure of naval warfare.

I enjoin each officer to give the greatest consideration to employing Naval War College extension courses toward the improvement of his military career and as a contribution to the service.—ADM Claude Ricketts, USN, *Vice Chief of Naval Operations.*

SINCE IT WAS ESTABLISHED in 1884, the Naval War College at Newport, R. I., has been the Navy's highest level school for the education of officers in naval warfare and the responsibilities of high command. It provides a fundamental understanding of sea and naval power and the relationship of these factors with national and international political, economic and military considerations.

War College students become familiar with allied military organization and operations, and are taught the philosophy of the relationship between the military and political aspects of various alliances. They learn what it takes to participate in joint and combined operations and joint and combined committee work. They gain an understanding of the importance of support operations. And they're prepared for higher command.

An education in the art of waging war is a necessity. Officers with a knowledge of strategy, logistics, tactics and international affairs are as necessary to the Navy as guns, ships, missiles and technical equipment. And, officers assigned to staff and command duties who demonstrate competency in the performance of their duties have an excellent opportunity for selection to higher rank.

(For example, 30 line captains were selected for flag rank in 1961. Of these 30 men, seven were serving as chiefs of staff when selected, and nine had served as chiefs of staff in the past. All 30 had served on high-level staffs in 29 key billets as captains. These were allied or U. S. operational staffs, and do not include billets in the Office of the Chief of Naval Operations. Thus, the 30 captains had a total of 45 important staff jobs, in addition to major commands and other responsibilities which weighed heavily in their selection for flag rank.)

This indicates that any officer's chances for promotion to higher rank are increased when he is assigned to a major command or staff, and he performs his duties in an outstanding manner.

Extension Courses Available from Naval War College

Here's a roundup of the correspondence courses available through the Naval War College extension course program. Regular and Reserve officers of the rank of LTJG and above, and the equivalent ranks in other services, are eligible to enroll. Requests for enrollment should be in letter form, addressed to the President, Naval War College, Newport, R. I., and sent via your commanding officer.

National and International Security Organization — Two installments; approximately 60 study hours.

Military Planning — Two installments; approximately 60 study hours.

Command Logistics — Three installments; approximately 60 study hours.

Naval Operations — Two installments; approximately 60 study hours.

International Law — Six installments; approximately 250 study hours.

International Relations — Six installments; approximately 250 study hours.

Selected Reading in International Law or *International Relations* — One installment each reading course; approximately 50 study hours each reading course.

Strategic Planning — Four installments; approximately 120 study hours.

Through studies at the Naval War College, officers are prepared for such assignments. They receive training in strategy, logistics, tactics and international affairs. All are responsibilities of high command and staff duties.

The best way is to be assigned to a resident course at the Naval War College, or at one of the other service colleges. Unfortunately, however, not all officers can attend, and even some who have been resident students of one major course — the Command and Staff Course — have not gained the knowledge provided through the other major course — — Naval Warfare — or vice versa.

But, the school's extension course program, which is available to all officers (LTJG and above), extends the benefits of the Naval War College to those who can't attend resident courses. The correspondence courses are tough, and they exact high standards of performance. But, from your career standpoint, they may well be worth the extra hours of study necessary to complete them.

The NWC extension course program has been given a new look. There seems to be general agreement that it's now much easier to learn about such things as national and international security organization, command logistics and strategic planning (see box for complete course listing).

In past years a large number of officers dropped their extension courses because they were not able to keep up with their regular duties at the same time. The courses were too hard.

The new courses have fewer and shorter installments, a more limited scope, less duplication of subject matter, more objective questions, shorter essays and less clerical work required of students.

The NWC correspondence courses are good, but, if it's possible, one of the NWC resident courses is encouraged for eligible officers. The two resident courses for active duty officers are:

Naval Warfare — Naval officers ordered to the Naval Warfare course must have served from 15 to 23 years of commissioned service. Officers of other services, of rank and service equivalent to the naval officers, and representatives of the State Department and certain other government agencies, are eligible to attend if quota limitations permit.

The Naval Warfare course furthers an understanding of the fundamentals of warfare in order to prepare officers for higher command. Emphasis is on the integrated employment of the elements of naval power in the accomplishment of the Navy's missions and upon the strategic employment of sea and naval power in the furtherance of national objectives. The importance and methods of participation in joint and combined committee work are studied.

Command and Staff — Naval officers ordered to the Command and Staff course must have served from 10 to 16 years of commissioned service. Officers of the other services who have equivalent rank and length of service are also eligible for enrollment if quotas permit.

The Command and Staff course covers the fundamentals of warfare with emphasis on the operational functions of command and the organization, functions, and procedures of operational staffs. Methods of participation in joint and combined committee work are also studied.

The War College curriculum also includes a *Naval Command Course* for senior foreign officers, which familiarizes them with U. S. Navy methods, practices and doctrines. NWC also schedules various programs for inactive Reservists.

Also, the college maintains the Naval Logistics Research Library, issues publications for general distribution (e. g. the *Naval War College Review; A Guide for Professional Reading for Officers;* the *International Law Blue Books*), and conducts annual discussions, during which both civilian and military leaders exchange ideas concerning national defense.

New Procedures Set Up for Requesting Medals, Awards

Two new forms have been devised for requesting medals and awards. They are NavPers 2887 and NavPers 2888.

NavPers 2887 will be used to request both original issue and replacement of campaign and service medals and awards.

It will also be used to request replacement only of Good Conduct Medals, Naval Reserve Medals and Armed Forces Reserve Medals.

NavPers 2888 will be used to request original issue of Good Conduct Medals and Good Conduct Award Certificates. This form requires listing of qualifying service from service records.

Requests for original issue for the Naval Reserve Medal and the Armed Forces Reserve Medal will still be made by letter furnishing the information required by the *Navy and Marine Corps Awards Manual* (NavPers 15,790).

An initial supply of the forms was made about 1 February. Supplies can be replenished through the Cognizance I Segment of the Navy Supply System.

Complete information on the new forms can be found in BuPers Notice 1650 of 25 Jan 1962.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

All-Navy Cartoon Contest
ENS Robert Charles Harvey, SC, USN

"Who's an empire-builder?"

Alnavs

No. 3 — Announced the acceptance by the Navy League of nominations for their annual awards of merit to civilians or military personnel.

No. 4 — Designated 18-25 February as Brotherhood Week.

Instructions

No. 4600.1C — Announces a revision to the system of estimating travel costs resulting from changes of home ports and home yards of ships and permanent duty station changes of aviation and certain miscellaneous units.

No. 5321.2E — Informs commanding officers, their seniors in the chain of command and manpower sponsors of the nature of the Manpower Authorization (NavPers 576), of the procedures for insuring its validity and of a forthcoming change in content.

Notices

No. 1430 (25 January) — Provided information regarding advancements resulting from the August 1961 Navy-wide examinations and regarding the opportunities for advancement which it was estimated would exist in February 1962 exams.

No. 1650 (25 January) — Announced the use of two new forms for requesting medals and awards, NavPers 2887 and NavPers 2888.

No. 1306 (2 February) — Announced the sea-tour commencement cutoff dates to establish the eligibility of enlisted personnel for Scavey Segment Two, effective 1 Jun 1962.

No. 1306 (2 February) — Announced new normal shore tour lengths for certain rates.

No. 1520 (2 February) — Announced the names of officers selected to attend the various service colleges during fiscal year 1963.

No. 1110 (6 February) — Announced a list of active duty enlisted personnel who have been provisionally selected for enrollment in the NROTC program.

No. 1560 (9 February) — Announced visits of members of the Advisory Committee to the Secretary of Defense on Non-Military Instruction to various commands and units.

No. 5321 (19 February) — Announced the elimination of the functional area code "W" in column 15 of the Manpower Authorization (NavPers 576).

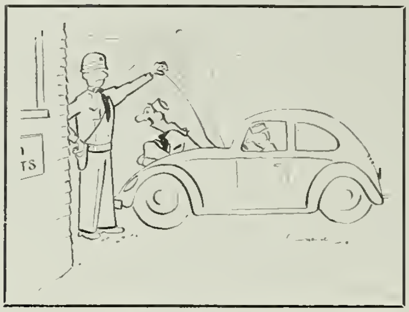
If You're Anxious to Know How You Made Out in Last Exams, Check This Table

If you passed an advancement in rating exam in February 1962, the chances of your actually being advanced may be anywhere from excellent down to poor — it all depends on your rating.

Opportunities for advancement are best in the ratings with the most vacancies. For example, in the RM rating, which is "open," advancement chances are excellent. On the other hand, a TD's chances for advancement look pretty slim. Advancements will probably be made for only 15 to 40 per cent of those who passed the TD3 and TDC exams, while a mere 15 per cent, at most, will be advanced to TD2 and TD1.

Most ratings, however, have good or excellent advancement opportunities. The following estimate is based on past statistics in computing the number likely to pass, and on the best data now available in calculating numbers of vacancies to be filled. Advancement opportunities in unlisted service ratings are the same as in the corresponding general ratings.

All-Navy Cartoon Contest
Frederick E. Cooksey, RMCS(SS), USN



"Putter-put-put."

Here's a key to the code numbers listed in the table below:

Code 1 — Excellent. Of those passing examinations, from 70 to 100 per cent will be advanced. (The greatest shortages exist in these rates.)

Code 2 — Good. Of those passing, from 40 to 70 per cent will be advanced.

Code 3 — Fair. Of those passing, from 40 to 70 per cent will be advanced.

Code 4 — Poor. Less than 15 per cent of those who pass will be advanced.

Rating	To Pay Grade E-4	E-5	E-6	E-7
Group I				
BM	2	2	2	1
QM	1	1	1	1
SM	1	1	1	2
RD	1	1	1	1
SO	1	1	1	1
Group II				
TM	1	1	2	2
GM	2	2	2	2
GS	1	1	1	1
FT	1	1	1	1
GMT	1	1	1	1
MN	2	4	4	2
Group III				
ET	1	1	1	1
Group IV				
IM	3	2	2	2
OM	2	1	1	2
Group V				
RM	1	1	1	1
CT	1	1	1	2
YN	1	2	2	2
PN	1	2	3	2
MA	1	2	1	1
SK	1	2	3	2
DK	1	2	3	3
PC	1	2	4	4
CS	1	3	3	2
SH	3	3	4	3
JO	2	1	1	1
Group VI				
LI	3	3	3	2
DM	3	1	1	4
MU	1	1	1	1
Group VII				
MM	1	1	1	1
EN	1	2	3	2
MR	1	1	1	2
BT	1	1	1	2
BR			1	1
EM	1	1	1	1
IC	1	1	1	1
SF	1	2	2	2
DC	1	2	3	2
PM	3	2	1	1
ML	2	3	2	1
Group VIII				
EA	3	3	1	2
CE	1	1	1	1
EO	2	4	4	3
CM	1	3	4	3
BU	1	1	2	3
SW	1	1	3	3
UT	1	2	4	2
Group IX				
ADJ	1	1	1	1
ADR	1	3	3	2
AT	1	1	1	1
AO	1	1	1	1
AQ	1	1	1	1
AC	2	3	3	3
AB	2	2	3	2
AE	1	1	2	2
AM	1	1	1	1
PR	1	1	2	2
AG	1	2	1	2
TD	3	4	4	3
AK	3	3	3	3
PH	1	1	3	2
PT	1	1	2	2
Group X				
HM	2	2	2	2
Group XI				
DT	2	3	3	2
Group XII				
SD	4	3	2	2

Machine Accountant School Opens at Bainbridge

Bainbridge has a new addition to its family of training schools. A Class A Machine Accountant School has been established for qualified personnel. The Personnel Accounting Machine Installation, Continental United States (PAMI CONUS) operates the school.

The Navy operates three types of schools to train machine accountants. In addition, a civilian manufacturer conducts special classes for personnel at various installations. These classes cover advanced areas of machine application, including computers and programing.

The first type of Navy school is a two-week course for field command personnel, on the Naval Manpower Information System (NMIS). Subjects covered are: Preparation of the personnel diary, Navy Enlisted Classification, Seavey/Shorvey, the Officer Distribution Control Report and BuPers Report 1080.14 (MOD). Each class is limited to 30 students.

The second type is the Class A school, which covers an average of 16 weeks. Graduates are designated in the machine accountant field and assigned only to machine accounting activities.

The third "school" is known as "in-service training." This training is given to personnel who, although not designated machine accountants, have been assigned to some machine accounting activities.

The Class A school at the Bainbridge Naval Training Center, Md., conducts six classes each year. Two of the classes are for men and four are for Waves. Each class is scheduled for a minimum of nine weeks' work, both classroom and practical. Nine weeks is the minimum time; however, the class can run longer. The graduates must be capable of mastering the work even if it takes a longer period of training. The average time for completion of the course is 16 weeks. The classes are kept small, running 10 to 15 people.

Honorman of the first class, with a 94 average, was John W. Hawsey, SA, USN.

Navy Relief Society Lent $3,500,000 To Navymen And Marines in 1961

In 1961, the Navy Relief Society granted more than 59,000 loans to Navymen, Marines and their families, according to the society's annual report on its operations.

The expenditures for these loans came to a little more than three and a half million dollars—somewhat less than the amount loaned by the society in 1960.

During 1961, many loans were made necessary by the recall of Reservists who encountered difficulty in the transition from civilian to military life.

In cases where repayment of assistance received from the society would cause undue hardship, the society makes outright grants. Grants of this type were made in over 16,000 cases. The total amount was about $824,000.

Grants totalling $1200 were made in the case of a 66-year-old retired Marine Corps master sergeant and his wife. The sergeant had suffered a stroke in 1958 and his right side was paralyzed. His wife, age 69, who was caring for him, developed a heart condition and needed assistance.

The sergeant had a mother, four sisters and other relatives in Georgia who could help with his care. The problem was to transport the sergeant from California to Georgia. Since he was a stretcher case, no official transportation could be provided.

The Navy Relief Society made arrangements for transportation, ambulances and hospital care where necessary en route and, after numerous complications including a 14-hour delay, got the couple to their destination. Other expenses and subsequent medical and hospital care ran the total aid to $1200.

In what the society calls "relief in kind" (layettes, nursery expenses, thrift shops and such), expenditures during 1961 came to some $190,000.

Besides helping financially, the society rendered assistance in over 54,000 cases last year where monetary help was not required. These "service cases" ranged from answering simple questions to complicated situations of personal and family distress.

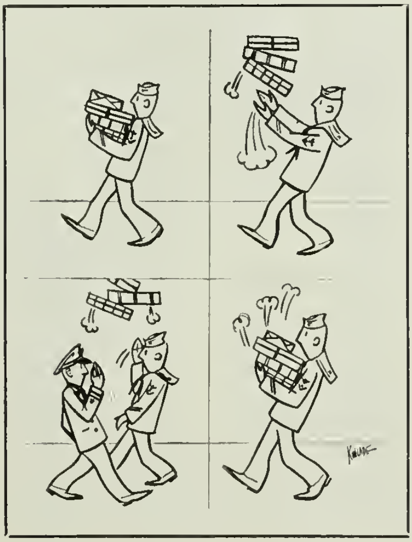
One service case concerns the parents of a two-year-old child who was left totally blind after tumors were removed from both her eyes.

Navy Relief arranged an interview with the Lighthouse for the Blind where the parents discussed their child's future training. The parents came away from the interview much reassured, especially after they realized the charming woman to whom they had been talking for 20 minutes was, herself, totally blind.

List of New and Re-Issued Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

All-Navy Cartoon Contest
LTJG P.B. Kincade, USN



Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

The Mark (1875) (C): Drama; Rod Steiger, Brenda De Banzie.

Come September (1876) (C) (WS): Comedy; Rock Hudson, Gina Lollobrigida.

The Parent Trap (1877) (C): Comedy; Maureen O'Hara, Brian Keith.

Follow A Star (1878): Comedy; Norman Wisdom, June Laverick.

Second Time Around (1879) (C) (WS): Comedy; Debbie Reynolds, Steve Forrest.

Bachelor in Paradise (1880) (C) (WS): Comedy; Bob Hope, Lana Turner.

Greyfriars Bobby (1881) (C): Drama; Donald Crisp, Laurence Naismith.

The Devil at Four O'Clock (1882) (C): Drama; Spencer Tracy, Frank Sinatra.

Wonders of Aladdin (1883) (C) (WS): Comedy; Donald O'Connor, Noelle Adam.

Minotaur (1884) (C) (WS): Melodrama; Bob Mathias, Alberto Lupo.

Season of Passion (1885): Drama; Ernest Borgnine, Angela Lansbury.

By Love Possessed (1886) (C): Drama; Lana Turner, Efrem Zimbalist, Jr..

Wake of the Red Witch (1887): Melodrama; John Wayne, Gail Russell (Re-issue).

The Story of Will Rogers (1888): Biographical Drama; Will Rogers, Jr., Jane Wyman (Re-issue).

Close to My Heart (1889): Melodrama; Ray Milland, Gene Tierney (Re-issue).

Dakota (1890): Western; John Wayne, Vera Ralston (Re-issue).

Flame of the Barbary Coast (1891): Western, John Wayne, Ann Dvorak (Re-issue).

That's My Man (1892): Melodrama; Don Ameche, Catherine McLeod (Re-issue).

Man of Conquest (1893): Melodrama; Richard Dix, Gail Patrick. (Re-issue).

Hoodlum Empire (1894): Melodrama; John Russell, Vera Ralston (Re-issue).

Dark Command (1895): Western; John Wayne (Re-issue).

Information for Navymen Who Are in Seavey Segment Two

SEA DUTY commencement cutoff dates for Navymen in 21 ratings were announced in BuPers Notice 1306, of Feb 1962. These men come under Seavey Segment Two, which becomes effective 1 June 1962; that is, the first sets of orders to shore duty billets will start being issued in June 1962, directing the transfer of personnel in October 1962.

Cutoff dates contained in the new notice are based on normal sea/shore rotation. If you are in Segment Two, were eligible on a previously effective Seavey (last year's Segment Two, for example), and were not ordered ashore during that Seavey year, you will *not* be required to submit a new rotation data card upon receipt of this new Seavey notice for your segment.

You should, however, be reminded of these important points:

- It is unfortunately true that a large number of Navymen on an effective Seavey segment miss being ordered ashore during the segment year simply because they have not made certain that they meet the minimum obligated service requirement. The effect is to make them ineligible for transfer. Normally, you must have a minimum of 12 months' active obligated service remaining to be ordered to U. S. or overseas shore duty from the Seavey, *with obligated service to be computed from the transfer month.* Rotation data cards are completed by shipboard-stationed Navymen approximately six months before the first transfer month for a particular segment—which, in the case of this year's Segment Two is October 1962. You might, if you fall within Segment Two, and depending upon your standing on the Seavey list, become eligible for transfer ashore at any time within that segment year, up to and including the last or 12th transfer month (September 1963). Thus you can see that, right now, you should have at least 30 months' obligated service remaining to insure receipt of orders to shore duty.

Let's cite an example. Suppose you are an MM1, which places you within Segment Two. Your sea duty commencement cutoff date (see chart below) is July 1957. Let's suppose further that you meet this cutoff date, and that you have an active duty base date of 1948, which should put you up near the top of the list in your rating for shore duty orders. The Bureau Seavey people will start writing orders for Segment 2-62 personnel in June 1962, for transfer ashore beginning in October 1962. Now let's suppose that by July 1962, they reach your name on the Seavey list, and that an opening for your rate exists in the area you have requested. At that time, they will write a set of orders for you to transfer ashore in November 1962—*if you have 16 months' obligated service remaining in July 1962.*

You can readily see—and this cannot be emphasized too strongly—that you must continue to have sufficient obligated service remaining from whatever date within the segment year that your orders are written. If you do not have the necessary time remaining when your name comes up on the Seavey list, your card is dropped into the inactive Seavey file—and will remain there until the Bureau is notified that you have extended or reenlisted, or have signed an agreement to extend or reenlist.

Now you may feel that such a move is a fairly simple process, and that you can easily, and quickly, become reinstated on the active Seavey list. Not so. This is a big Navy, and your paperwork is not, by a long shot, the only paperwork in the mill each day. Seavey officials say that it normally takes two to three months to restore a man to the active Seavey list once he has been dropped. That two to three month interval means, in a nutshell, that you will spend at least that much more time at sea waiting for your shore duty orders. And another thing—while you're cooling your heels aboard ship for that additional two to three months or longer, that choice shore duty billet which might well have been yours has probably been filled by someone else originally junior to you on the Seavey.

You might, as a matter of fact, wind up spending a good deal longer than a few extra months at sea. You might even wind up in a brand new segment. Here's how.

Suppose that you, this same MM1, are fairly junior (according to your active duty base date) on the Segment 2-62 list for your rate. Assume, then, that your name is not reached on the Seavey list until June 1963, the 12th month of the Segment 2-62 year. Assume further that in May 1963 you become ineligible for transfer to shore duty because you have less than 16 months' active obligated service remaining. When this happens, as we've pointed out above, your name is removed from the active Seavey list, and your card is placed in the inactive Seavey file.

While it is still reposing there (and while you, meanwhile, are chafing at the bit aboard your ship, wondering why you're not receiving your orders), Segment 2-63, which begins

SEA DUTY COMMENCEMENT CUTOFF DATES FOR SEAVEY SEGMENT 2-62

RATE	DATE	RATE	DATE	RATE	DATE	RATE	DATE
CSC	Oct 59	DC1	Jun 58	BTC	Sep 58	CM1	Oct 60
CS1, 2	Dec 59	DC2	Sep 57	BT1	Oct 55	CM2	Jun 60
CS3, SN	Mar 60	DC3, FN	Dec 58	BT2	Apr 56	CM3, CN	Oct 60
SHC	Jun 60	PMC, 1	Oct 60	BT3, FN	Feb 57	BUC, 1	Oct 60
SH1	Jun 57	PM2	Jun 58	BRC	Dec 58	BU2	Jun 60
SH2	Dec 55	PM3, FN	Dec 58	BR1	Mar 59	BU3, CN	Apr 60
SH3, SN	Apr 55	MLC, 1	Jun 60	EMC	Jan 60	SWC, 1, 2,	Dec 58
MMC	Dec 58	ML2	Dec 56	EM1	Sep 58	SW3, CN	Dec 59
MM1	Jul 57	ML3, FN	Dec 57	EM2	Dec 58	UTC	Sep 60
MM2	Nov 57	EAC, 1, 2,		EM3, FN	Sep 59	UT1	Dec 59
MM3, FN	Nov 58	3, CN	Oct 60	ICC	Oct 60	UT2, 3,	
ENC	Feb 59	CEC, 1, 2		IC1, 2	Mar 60	CN	Jun 59
EN1	Feb 57	3, CN	Oct 60	IC3, FN	Oct 59	SDC	Sep 59
EN2	Mar 57	EOC	Jun 60	SFC	Sep 59	SD1	Dec 57
EN3, FN	Jun 58	EO1	Sep 60	SF1	Aug 57	SD2	Feb 58
MRC	Sep 59	EO2, 3,		SF2	Oct 56	SD3	Jun 57
MR1, 2	Mar 60	CN	Oct 60	SF3, FN	Sep 58	TN	May 59
MR3, FN	Dec 59	CMC	Sep 60	DCC	Jun 60		

in June 1963, rolls around. You may have already taken the necessary steps to become reinstated onto the active Seavey, but suppose such information doesn't reach the Bureau before the new segment year has started. In this case, when the Seavey people do get the word that you now have the necessary obligated service, you will be reinstated onto the active Seavey, but (and this is a highly important but) *you will be placed in the new, or 2-63 segment, not in the 2-62 segment from which you have been dropped.* You would then find yourself junior to all men of your rate who are still in previous segment twos, including 2-62, and would be, as a member of segment 2-63, in the position of being considered for shore duty on the basis of seniority among men at least a year junior to you by sea duty time.

Boil all of the above down to a few words of practical advice and you come up with something like this: Don't let yourself get caught short on obligated service time if you're looking for shore duty. Obviously, the Seavey program is geared to provide the maximum benefit to career men. If you are a career man, it behooves you to make sure you have sufficient obligated service.

- There is a second, almost equally important consideration you should think about if you want early assignment to shore duty once you are placed in a segment. *General choices of area (naval district) preference, widely spread geographically, will usually result in quicker assignment ashore.*

If you insist on designating only one specific naval district as your preference for shore duty assignment, you may well spend many additional months aboard your ship waiting for a billet in your rate to open up in that district, while many other men junior to you on the Seavey list, who have wisely provided Seavey assignment officers with more latitude (anywhere West Coast; anywhere east of the Mississippi, etc.,) are trundling off to shore duty.

Every attempt is made to assign you to an area of your preference, consistent with the needs of the service, individual seniority and other considerations. If you indicate more than one specific duty choice, however, nine times out of ten you'll get ashore much faster.

"Why no, those aren't hash marks—He's the ship's barber."

Eligibility Requirements Listed for Applicants As Naval Aviation Observers

The Navy has established eligibility requirements and opened the field for Naval Aviation Observer applications from commissioned line officers of the Regular Navy and Naval Reserve, and officer candidates.

Naval Aviation Observers are officers who aid the pilot in duties incidental to flying. They function in such fields as navigation, bombardier/navigator, ASW tactical evaluator, controller, airborne intercept, radar and electronic countermeasures.

To be eligible for the program, a candidate must:

- Be a commissioned line officer in the Regular Navy or Naval Reserve or be a candidate for a line commission.
- Be less than 30 years of age when he applies.
- Be physically qualified and adapted for flying duty.
- Have a baccalaureate degree from an accredited college or university.
- Attain a minimum score of 3 on the Aviation Qualification Test.
- Not have been disenrolled from any flight training program for any reason other than physical or flight failure.

The applicant must agree to remain on active duty for a period of three years after training ends.

Officers who fail to complete observer training successfully will be reassigned to ground duty within the aviation branch of the Navy unless the needs of the service dictate otherwise.

Full details can be found in BuPers Inst. 1520.85.

WHAT'S IN A NAME

Underwater Ham Station

While en route to the Caribbean for Springboard 1962, USS *Cutlass* (SS 478), in January, began active operation of the first underwater ham radio station.

The station transmits under the call sign W4NMK, the personal call of LCDR J. D. Reilly, Jr. USN, commanding officer of *Cutlass*. In the first two weeks of operation, 250 separate contacts were made, including 31 states, the District of Columbia, (including the Pentagon) and 15 foreign countries. The longest-range contact was made with station KC4USB in Marie Byrd Land, Antarctica, while the ship was at periscope depth. (The major portion of all contacts was made while submerged.)

The novelty of W4NMK's location has usually brought in more answering stations than can be handled, within minutes of the initial "CQ" signal, and indicates the possibility of a new FCC ham designation of Maritime/Mobile (Underwater)."

Although the station has been in operation for only a short time, regularly scheduled contacts with the ship's home port of Norfolk have been made through the courtesy of K4TGA. The men of *Cutlass* have therefore been able to call their homes, through a phone patch system, from any point on or below the Atlantic.

CECOS: Through These Portals Pass All Navy CEC Officers

Building 44 at the Construction Battalion Center, Port Hueneme, Calif., was originally constructed late in World War II as an enlisted Wave Barracks. Outwardly, it hasn't changed much over the years. It isn't ivy-covered, either — but for more than 16 years now it has been alma mater to the officers of the Navy's Civil Engineer Corps.

CECOS (or the U. S. Naval School, Civil Engineer Corps Officers, as it's officially known) graduates just about one-sixth of the total active duty strength of the CEC from its basic course each year. Founded in 1945 as an outgrowth of the WW II officer training programs carried on at various Seabee training centers, its primary mission is to provide instruction in CEC duties to all officers entering the Corps, from whatever source.

OCS and NROTC graduates, line transferees, Naval Academy graduates, members of the CEC postgraduate program, LDOs and the rare appointees commissioned directly from civilian life all pass through CECOS before reporting to their first duty stations as Civil Engineering Corps officers.

In the eight-week basic course, CECOS students are taught the fundamentals of engineering management as they apply to civil engineering in the Navy, and are given an introduction to the nuts and bolts of the specific duty station they are headed for. This introduction is divided into two phases.

The general phase, approximately five weeks long, is taken by all students. Then, during the final three weeks, the class is split up into specialization groups, depending upon upcoming duty assignments. In this phase, students concentrate on either station Public Works management, contract administration, or Seabee battalion duty. Seabee officers, in addition to their CECOS schooling, get three weeks of military training at the Marine Corps Base, Camp Pendleton, and a one-week military justice course at Fleet Training Center, San Diego.

Nearly a dozen short courses, covering a variety of fields important to the CEC and the shore establishment, are also included in the CECOS agenda.

Among them are two two-week courses in disaster control, which also draw many students from other branches of the armed forces and from Civil Defense organizations. One, *Disaster Engineering*, offers training to officer and civilian engineers in planning for and coping with the effects of both natural and man-made disasters: *Disaster Operations* provides a similar background to operational planners and other non-engineering personnel.

Two courses collectively termed Atomic Defense Engineering—*Atomic Defense Construction Engineering* (ADE I) and *Structural Dynamics and Radiation Shielding* (ADE II) — furnish structural engineers and facility planners with intensive training in protective design. This includes both engineering design of new structures and analysis of existing facilities to provide protection against blast and nuclear radiation.

These courses have been described by U. S. Civil Defense officials as the most comprehensive in the country, covering in detail every phase of atomic defense, together with structural engineering theories and problems.

Because of its success in the atomic defense engineering field, CECOS has been designated by the federal government to conduct an intensive two-week course in fallout shelter technology for civilian architects and engineers involved in the national fallout shelter program. More than 300 experienced engineers have attended this course, presented nine times between September 1961 and March of this year. During the same period, in cooperation with BuDocks, CECOS staged a concentrated two-day program in shelter technology for CEC officers at a number of locations in the U. S. and the Pacific.

Still other two-week courses cover the fundamental specializations of Public Works: *Contract Administration* and *Construction Battalion Operation*. They parallel the material covered in the basic course, and are available to both Naval Reserve officers on active duty training tours and to active duty officers who want a refresher course before moving on to another duty station. A course in *Shore Facilities Planning*, for example, was given for the first time in August 1961, and is scheduled to be

How to Apply for CECOS

The basic course at CECOS is filled primarily by newly commissioned officers who attend before proceeding to their first permanent CEC assignment. The Ensign/Lieutenant (JG) detailer in BuPers automatically specifies attendance at CECOS in writing their orders to their first duty station. In a few special cases, where a CEC officer may not have attended CECOS when first commissioned, it might be possible for him to go, upon request to BuPers, between permanent duty stations.

Select or specialized two-week courses in Public Works, Contract Administration, Construction Battalions, Facilities Planning and Naval Industrial Funding may be attended by any officer whose command will send him. Quotas for these courses are generally held by District Commandants and by the OinC, CECOS.

Specialized courses in Disaster Engineering, Disaster Operations and Atomic Defense Engineering are similar to the select courses in that each lasts about two weeks, and quotas are distributed in much the same way. It should be noted, however, that the ADE courses are highly technical, and require previous education in structural engineering.

Quotas for the Senior Friendly Allied Officer course are controlled by CNO, and are distributed to the various countries participating in the Military Assistance Program. Junior allied officers do not have a specific course set aside for them, but may attend most of those listed above through the MAP.

BuDocks Inst. 1520.3 provides further information on all courses, including instructions for applying. BuPers Inst. 1500.25H lists convening dates for all courses.

repeated twice annually. *Advanced Base Development* is covered in another two-week presentation which is given as the needs of the service require. Newest of them all is the *Naval Industrial Fund Accounting* course, which will be given for the first time in April 1962, and thereafter, in conjunction with each basic class. It will be attended by basic students scheduled for duty at activities which use Naval Industrial Fund Accounting procedures, and will also be open to other officers and civilians whose duties require a knowledge of the NIF accounting process.

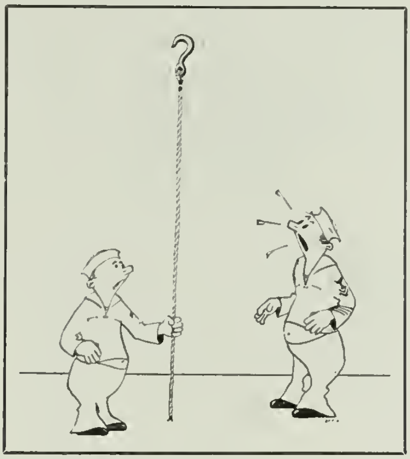
A six-week course in *Construction and Maintenance of Naval Shore Facilities* for senior foreign officers is held each year. This year's session, third of its kind, will commence late in April. Through it, senior officers of friendly foreign nations are taught the systems and procedures BuDocks uses to manage its responsibilities within the shore establishment. An important collateral objective is to furnish these allies with a cross-section view of American life. In addition to classroom lectures, therefore, the schedule features an active program of visits to typical industrial plants in the southern California area, and civic, cultural and social activities.

A number of junior foreign officers also attend CECOS' basic course each year, usually taking the Public Works option. In the recent past, students representing Iran, Turkey, Great Britain, Canada, Chile, Japan, Korea, China, Thailand and Indonesia have studied at CECOS.

Besides the resident courses offered at Port Hueneme, CECOS contributes to the training of CEC officers in a variety of other ways. The basic work on BuDocks' junior officer on-the-job training program was done by the CECOS faculty. That same faculty also assists the Training Publications Center in the preparation and revision of textbooks for correspondence and home-study courses. Another extension service, begun last summer, saw three CECOS instructors travel to Davisville, R. I., to present ADE courses on the East Coast.

For all of this training, the Navy's investment is a modest one. Ten officers, four civilian professors, seven other civilian employees and eight enlisted men make up the school's permanent staff. Guest speakers from private industry and other military activities supplement their efforts. In selecting its instructors, CECOS places heavy emphasis on qualification in the subject field which the individual will teach; for the Disaster Control and ADE courses, for example, this qualification must include appropriate postgraduate instruction as well as field experience. Two CECOS teachers have participated in nuclear weapons testing, and two others have research experience in the field of nuclear radiation. Each civilian faculty member is a present or former CEC Reserve officer with active duty experience.

All-Navy Cartoon Contest
Garland Thomas Loftis, SFP2, USN



"Here's the sky hook you wanted, Boats."

Billets at Sea and Shore Locations Listed for Members of EOD Units

Several months ago ALL HANDS told the story of the Navy's Explosive Ordnance Disposal Corps and outlined the procedure that men of eligible ratings should follow when seeking assignment to the EOD School at Indian Head, Md. (ALL HANDS, January 1962). Since then, a number of Navymen interested in EOD have requested that ALL HANDS list the various sea and shore billets to which EOD technicians may be assigned. Here's a roundup:

Shore Duty (Continental U. S.); 128 billets –

Each Naval District
EOD Tech Center, Indian Head, Md.
EOD School, Indian Head, Md.
Underwater Swimmer's School, Key West, Fla.

Sea Duty (ships and seagoing, shore-based, EOD units); 239 billets –

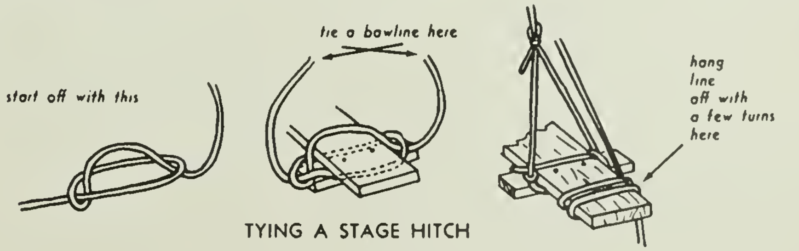
All attack and escort aircraft carriers (CVA, CVE)
All ammunition ships (AE)
All seaplane tenders (AV)
Some destroyer tenders (AD)
EOD Unit, Charleston, S. C. (44 billets)
EOD Unit, Pearl Harbor, Hawaii (32 billets)
EOD Test Facility, Fort Lauderdale, Fla.
Harbor Defense Unit, Norfolk, Va.
Underwater Demolition Teams (Norfolk, Va., San Diego, Calif.)

Sea Duty (Overseas shore); 40 billets –

Hawaii
Guam
Midway
Kwajalein
Philippines (Subic Bay)
Japan (Sasebo, Yokosuka)
Alaska (Adak, Kodiak)
Cuba (Guantanamo Bay)
Puerto Rico (10th ND)
Bermuda
Newfoundland (Argentia)
Iceland (Keflavik)
Spain (Rota)
Sicily (Sigonella)

In general, EOD sea-type billets

Grains of Salt —



TYING A STAGE HITCH

outnumber shore billets. Therefore, prospective EOD technicians should consider the chances are good they will be assigned to sea duty after being graduated from EOD school. (This is a good deal for many EOD men who prefer sea duty because of the choice overseas shore billets.) Frequent refresher courses in new weapons are required, so all EOD men return to school at Indian Head approximately every two years.

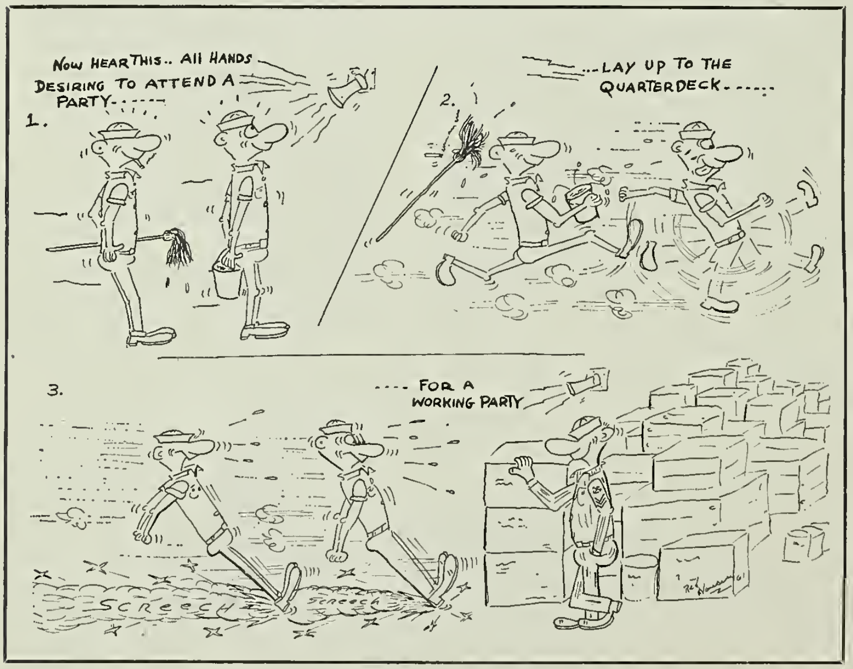
EOD technicians are rotated under Seavey/Shorvey in the same manner as other Navymen of the same ratings. But, since there is a shortage of qualified EOD men, they can normally expect transfer orders to shore duty during the first month of the Seavey year rather than waiting for a month-to-month selection.

If you're interested in EOD, here's a review of the qualifications you must possess before you are assigned to EOD school. You must be an officer, or petty officer of one of these ratings: AO, BM, EM, EN, GM, MN, GMT or TM. Petty officers of other ratings may request waivers. You must volunteer, and must be willing to undergo intensive training and study. You must be cleared for Top Secret work, and, if you are not qualified in Scuba diving and as Diver 2nd Class, you must attend the Underwater Swimmer's School in Key West, Fla., and successfully complete a 10-week diving course before enrollment at Indian Head.

If you're an enlisted man, your GCT must be at least 55, and your MK ELECT or MECH at least 50. Officers must agree to remain on active duty for 18 months after graduation from EOD school.

All requests for EOD training should be directed to the Chief of Naval Personnel (Pers B2112) via normal chain of command channels.

All-Navy Cartoon Contest P.A. Hansen, EN2, USN


1.
Now HEAR THIS.. All HANDS DESIRING TO ATTEND A PARTY-
2.
...LAY UP TO THE QUARTERDECK-----
3.
---- FOR A WORKING PARTY
SCREECH
SCREECH

Guided Missileman Is Now Called Missile Technician

Additional emphasis on the test, repair, tuning and alignment of missile internal guidance systems and alignment and use of missile electronic test equipment are some of the reasons behind a recently announced change to the enlisted rating structure redesignating the general rating of guided missileman (GS) as missile technician (MT).

The change, as approved by the Secretary of the Navy, became effective 15 Jan 1962.

Change 18 to the *Manual of Qualifications for Advancement in Rating* (NavPers 18068) contains revised qualifications for the rating. Training courses and publications listed for the old GS rating in *Training Publications for Advancement in Rating* (NavPers 10052-1) remain in effect for the new MT rating. The path of advancement to LDO status also remains the same, that is, to LDO Control Ordnance.

The August 1962 Navy-wide examinations will reflect this change for all active duty Navymen.

Here Are the Latest Correspondence Courses

Seven new correspondence courses – six for enlisted men and one for officers – have been issued by the Navy Correspondence Course Center.

Enlisted courses for active duty Navymen are administered, in most cases, by the local command. Your division officer will help you select the courses best suited to your rate and training program, and will see that your application (NavPers 231) is forwarded to the Correspondence Course Center.

NEW COURSES

Course	NavPers No.
ECC Sonarman A 3 & 2	91263
ECC Aviation Fire Control Tech 1 & C	91635-1
ECC Equipment Operator 3 & 2	91574-2
ECC Aviation Boatswain's Mate "H" 3 & 2	91636-1
ECC Basic Military Requirements	91202-1
ECC Aviation Machinist's Mate 2	91598-1
OCC Navy Contract Law	10988-A

DISCONTINUED COURSES

Course	NavPers No.
ECC Driver 3	91573-1A
ECC Driver 2	91574-1A
ECC Aviation Boatswain's Mate 3 & 2, Vol. 1	91636
ECC Basic Military Requirements	91202-A
ECC Aviation Machinist's Mate 2	91598-A

Check These Changes In Latest Revision To the BuPers Manual

Revisions in the *Bureau of Naval Personnel Manual,* touching on subjects which range from the enlisted precedence list to inspections of Reserve activities have been made under Change Number Seven.

The revisions are designed to:

Clarify the requirements for *reenlistment bonus.*

Explain entitlement to supplementary *subsistence allowance.*

Revise regulations governing issuance of *Honorable Discharge Buttons* to provide for issuance of Regular Navy design to members who have completed an enlistment in the Regular Navy as part of the UMT&S obligation.

Clarify instructions for maintenance of *officer service records.*

Incorporate instructions for simultaneous forwarding of health and service records of *Reservists* upon release to inactive duty.

Revise instructions for preparing *record of emergency data.*

Change *enlisted precedence list* to reflect recent rating changes.

Incorporate instructions for preparing TraHab orders. (*Training and/or rehabilitation*).

Incorporate authority for granting *sick leave* to naval personnel hospitalized in Public Health Service hospitals.

Revise definition of Commanding Officer, for purposes of effecting advancements of enlisted personnel, to include *Officers-in-Charge* who are so designated by departmental orders.

Eliminate the possibility of personnel retaining an *advancement* gained through fraudulent means.

Revise qualifications for *underwater demolition team* officers.

Change qualifications for submarine *medical officers.*

Revise visual acuity requirement for *expert lookouts.*

Alter instructions for forwarding records of *deserters.*

Change instructions for notifying FBI in case of escaped *prisoners.*

Clarify instructions for submission of special *evaluations.*

Further explain *casualty reporting* procedures.

Clarify instructions for *notifying next of kin* in case of casualties.

Provide additional guidance for preparation of letters to *next of kin* in case of missing personnel.

Update instructions concerning disposition of *personal effects* of deceased, captured, missing or incapacitated personnel.

Provide new instructions for escorts to accompany *dependents.*

Include instructions for payment of *death gratuity* to a widow when a member dies while on duty with a deployed unit.

Clarify procedures for *submission of claims* for unpaid pay and allowances.

Revise instructions for separation of *enlisted women* by reason of marriage.

Change instructions for preparation of *discharge certificates.*

Revise regulations governing *visits to foreign* countries.

Amplify entrance requirements for *enlisted schools.*

Incorporate information regarding *Code of Conduct* training programs.

Include responsibilities of Commander, *Naval Reserve Training Command.*

Revise responsibilities of *district commandants* and the Chief of Naval Air Reserve Training.

Update the functions of *commanding officers* of Naval Reserve training activities.

Bring up to date regulations governing *inspection* of Naval Reserve activities.

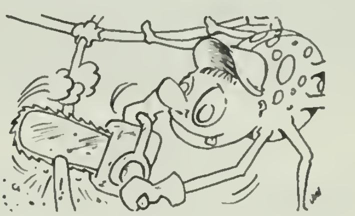
Incorporate new policy concerning *Reservists* who possess civilian qualifications which are incompatible with their Reserve status.

Clarify procedure for submission and monitoring of supplemental or corrected Naval Reserve *drill reports.*

Revise regulations governing *orders to active duty* for training, to provide for issuance of permissive type orders to active duty for training without pay and to prohibit orders involving stopover travel.

Revise instructions for closing out records of *Reservists* who have failed to reply to official correspondence, to provide for preparation of discharge certificate for subsequent delivery to dischargee.

Besides these revisions, Change Seven includes a number of pen-and-ink corrections, deletions and a list of the articles modified.



Small Thinkers

"Think small!" might well be the motto of a Pasadena firm cooperating with the Office of Naval Research in Navy micro-miniaturization research at the California Institute of Technology.

One of the firm's engineers, reportedly motivated by a $1000 bet with a Cal Tech faculty member, came forth with a workable electric motor one fourth the size of a pinhead.

The motor has 13 separate parts which were assembled with the help of a microscope. It produces a millionth of a horsepower.

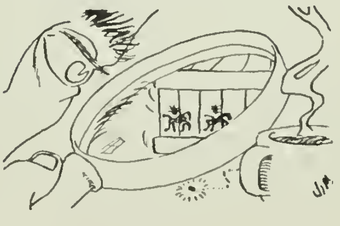
Although the building of the motor was not a part of the research which ONR is sponsoring, the device was reported to the Pasadena office of the Office of Naval Research.

For the present, of course, the micro-micro motor has no conceivable application. It may be a step, however, in the process of micro-miniaturization of power devices which now has become significant in several fields.

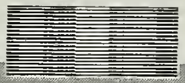
In the meantime, scientists have been spending their coffee breaks thinking up possible uses for the little motor.

Nothing terribly practical has been thought of as yet but some of the suggestions are: Operating a merry-go-round for fleas; providing power for a personal ear phonograph; or running a power saw for spider webs.

As an illustration of what may be accomplished in the field of micro-miniaturization, however, it stands in quite a different category.



DECORATIONS & CITATIONS



DISTINGUISHED SERVICE MEDAL

"For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . ."

★ Russell, James S., ADM, usn, for service in a duty of great responsibility as Vice Chief of Naval Operations from July 1958 to November 1961. Exercising administrative, planning, and operational ability of the highest caliber, Admiral Russell has been eminently successful in carrying out an extremely difficult and exacting assignment. As executive to the Chief of Naval Operations, he displayed sound judgment and keen foresight in resolving complex problems involving a Navy in transition to rocketry and nuclear power, politico-military actions resulting from the cold war, and world-wide commitments to our allies. Through his progressive leadership, vision, and wide knowledge and background of naval operations and administration, coupled with his complete intellectual honesty in dealing with political and military officials, he was able to produce, through the very force of his personality, results of signal value to the United States.

LEGION OF MERIT

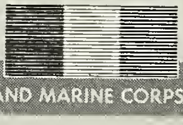
"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

Gold Star in Lieu of Second Award

★ McKechnie, Arnold W., RADM, usn, for service from May 1960 to October 1961 as Chief of Naval Air Reserve Training. Under RADM McKechnie's leadership and guidance, particular attention has been devoted to elimination of tactical deficiencies and administrative weaknesses in connection with Reserve squadron readiness and recall procedures. The squadrons of the Naval Air Reserve have improved in efficiency and preparedness to a degree that they are now well qualified to make an immediate and effective contribution to the Fleet in event of emergency. As a result of his strong personal interest in aviation safety and the reduction of aircraft accidents, the Naval Air Reserve for the first time in its history experienced less than one aircraft accident per 10,000 hours flown, a truly remarkable achievement for a command which flies Fleet operational models almost exclusively.

★ Kalasinsky, Frank, LCDR, usn, for the performance of outstanding service from 16 Apr to 6 Jun 1961 as Commander Task Unit 48.7.6. Engaged in salvage operations of uss *Baldwin* (DD 624), which grounded off Montauk Point, Long Island, N. Y., LCDR Kalasinsky exercised outstanding leadership, sound judgment, and unwavering tenacity in the face of extremely adverse and hazardous circumstances. Instilling within his men the will to carry on after hard-won gains had been negated time and again by gale-force winds and heavy seas, he made a major contribution to the success of the seven-week operation by his dynamic personal direction.

★ Peltier, Eugene J., RADM, CEC, usn, for the performance of outstanding services from December 1957 to January 1962 as Chief, Bureau of Yards and Docks. RADM Peltier set new objectives to adjust to the rapidly advancing technological revolution in the Navy and to provide the best possible engineering support to the Operating Forces and the Shore Establishment. Under his guidance, the implementation of engineered management programs and the revision of guideline specifications, definitive drawings and design manuals have produced tangible savings of considerable magnitude to the government of the United States. In the field of military construction, he has incorporated the very latest design and construction techniques known to the industry, resulting in new construction at costs below previous levels. His leadership in implementing streamlined procedures has resulted in more rapid planning, design, and construction to meet the critical demands of modern-day weaponry.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ Beason, James C., FA, usn, for heroic conduct on the night of 28 Oct 1961 while serving on board uss *Ajax* (AR 6) at anchor in open roadstead off Iwakuni, Japan. When a shipmate accidentally fell into the water while disembarking from a liberty launch alongside *Ajax*, Beason, as engineer of the motor launch, immediately dived into the hazardous waters and, despite darkness, strong winds, and the dangerous current, succeeded in reaching the victim and in keeping him afloat until others could assist in the rescue. By his prompt and courageous action in an emergency, Beason was directly instrumental in saving the life of a shipmate.

★ Reed, James F., LTJG, usn, for heroic conduct on 27 Apr 1961 while serving on board uss *Braine* (DD 630), en route from Pearl Harbor to San Diego. When a shipmate was washed overboard during heavy seas, and was unable to reach the life rings thrown to him, LTJG Reed leaped into the treacherous waters, swam to the side of the struggling and nearly exhausted victim and kept him afloat until a rescue craft picked up both men. Demonstrating prompt and courageous action, LTJG Reed risked his own life to save that of another.

★ Ross, Glenn R., SN, usn, for heroic conduct on 29 Jul 1957 while serving on board *Pitchlynn* (YTB 283), which was engaged in salvage operations in the Delaware River off New Castle, Del. Alerted by the screams of a 12-year-old girl bather who was being carried downstream by an outgoing tide, Ross quickly discarded his outer clothing, dived over the side of *Pitchlynn*, and swam a distance of approximately 200 yards to the side of the floundering victim. He then swam with her against the strong current to within 25 feet of his vessel, where a life ring was tossed to him and both he and the girl were lifted to safety.

★ Van Voorhis, John A., PRAA, usn, for heroic conduct in rescuing a Moroccan citizen from drowning at Medhia Beach near Kenitra, Morocco, on the afternoon of 13 May 1961. Upon learning that a swimmer was in difficulty in the treacherous surf approximately 200 yards offshore, Van Voorhis immediately entered the dangerous waters and swam to the side of the panic-stricken victim, who had thwarted the rescue attempts of several other swimmers. Despite determined resistance, Van Voorhis succeeded in swimming with the man against the strong undertow to the safety of shallow water, where he received help in completing the rescue. Displaying initiative and courage, Van Voorhis risked his own life to save that of another.

BOOKS

YOU HAVE A BIG CHOICE OF BOOKS ON ALL SUBJECTS

TWO SELECTIONS which may be found at your ship or station library will be of special interest this month. **Seadragon** will attract the fancy of most Navymen (especially submariners), and **Marine!** will cause most Marines to swell with pride.

Seadragon, by CDR George P. Steel, USN, is, of course, the story of how the nuclear submarine of that name made the first east-west traverse of the Arctic Ocean. As commanding officer, CDR Steele tells of the tremendous preparations necessary for the voyage, the intensive training undertaken before the sub departed. Especially equipped with the newest in sonar and iceberg detecting devices, *Seadragon* explored new passages and investigated giant icebergs hundreds of feet below the surface. CDR Steele describes in considerable detail the workings of the ship and the work and living conditions of the crew. He also devotes considerable space to early, much more uncomfortable exploration of the same area. Preferred reading for any Navyman.

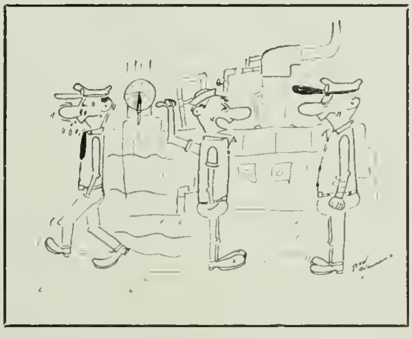
Marine! by Burke Davis, is of course, preferred reading for any Marine as well as Navyman. As you may have heard, it is the life story of that most fabulous Marine of them all — Lieutenant General Lewis Burwell (Chesty) Puller, holder of five Navy Crosses, hero of five great U. S. military campaigns and an outstanding symbol of old-style, almost mythical heroism to all Marines. Burke takes Puller at a gallop through the Haiti occupation of 1919, the Nicaragua campaign, Shanghai duty, Guadalcanal and other rough South Pacific fights of World War II, and ends with the Chosin Reservoir retreat during the Korean episode. Not only is Puller's military career described in some detail but also his own philosophy on military training and preparedness. Anyone who reads this will understand why the Marines have such pride in their outfit.

Not quite so glamorous perhaps, but equally sound is **Squadrons of the Sea,** by Arch Whitehouse. This describes the development of the aircraft carrier from the time a British land fighter flew off an old barge to attack a Zeppelin in 1918 to its present-day importance in naval strategy. The carrier's development is traced through a series of episodes which are given meaning by narrative material. World War II, and its great carrier battles, of course, constitute the larger part of the book. It all concludes with an analysis of the aircraft carrier today and the future role it will be called upon to play.

Hit the Beach by RADM Arthur A. Ageton, USN, (Ret.) is a startlingly realistic World War II yarn of the amphibious forces in the South Pacific. If the name sounds familiar, it should. Admiral Ageton served in many type ships during the Big War and commanded amphibious task groups in the Pacific. He is coauthor of *The Naval Officer's Guide* and has written several fiction and non-fiction books. You'll find it in a paperback edition.

The Guns of August, by Barbara W. Tuchman is somewhat more localized in time and space. *Guns* describes the political events leading up to the first World War, and the first 30 days of that war in a manner which combines sound historical material with a smooth literary style. The German, French, English and Russian general staffs had had their plans for war completed years before hostilities began. None of these plans allowed for the contingencies of the others or recognized their own errors, even though for at least five years, each general staff knew what the other would do. It didn't work out that way, and Mrs. Tuchman tells why. Her explanation includes the battles of Liege, Tannenberg, Mons, the Battle of the Frontiers, and Charleroi, each name signifying careers made or broken, opportunities grasped or missed, individual heroism or personal blindness.

All-Navy Cartoon Contest
P.A. Hansen, EN2, USN



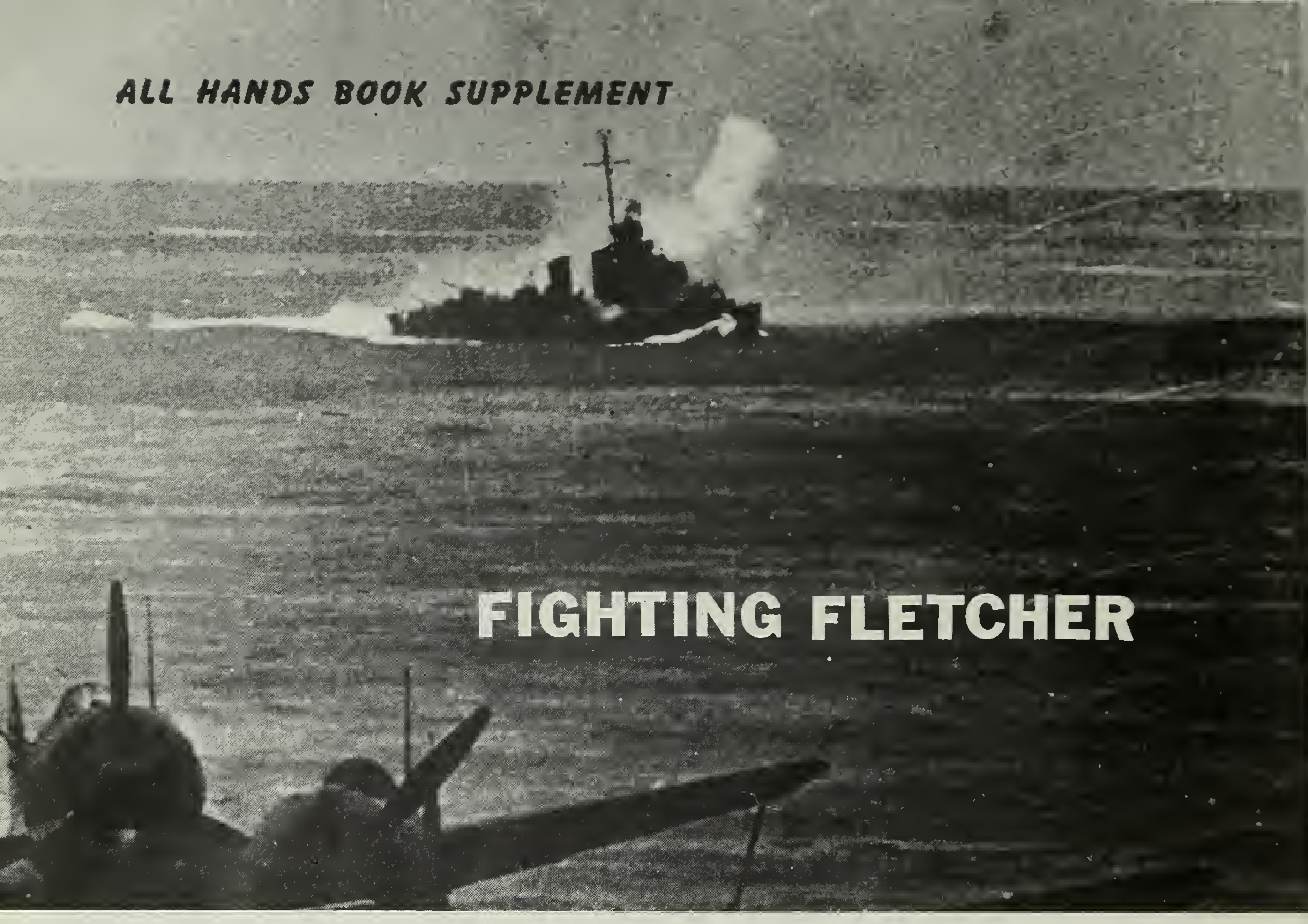
"What's wrong, Chief? All I asked was, 'What valves do we line up to pipe the admiral aboard?' "

The Sea, by Leonard Engel and the editors of *Life Magazine* is another slick and competent presentation of a wide-ranging subject. Magnificently illustrated — of course — *Sea* covers the standard oceanographic subjects, such as origin, underwater landscape, currents, waves and tides, and life forms with a special chapter on sharks and another on mammals in a highly condensed yet readable fashion.

Gravity, by George Gamow, simply proves again that almost any subject can be interesting if presented by an expert—an expert in the art of presentation, not necessarily the subject matter under discussion. This is not to suggest, however, that Gamow is not a most competent physicist. He is in the happy position of being an expert in more than one field. Why was gravity selected for discussion? As Gamow points out in his preface, gravity rules the universe. It holds together the billions of stars in our Milky Way, it makes the earth revolve around the sun and the moon around the earth, it makes apples and disabled airplanes fall to the ground. It is so universal a phenomenon that we're inclined to ignore it.

Enough of such heavy stuff, treated however lightly. For relief, try a novel such as **The Lisa Bastian,** by James Wood. This is a he-man, blood-and-thunder number which successfully combines ship salvage, illegal seining, spies, refugees and the MVD. Stir all this together with Norwegian and British waters as locale, add a chase, garnish with The Girl, and you end with a thriller.

Remember *Andersonville*? MacKinley Kantor has done it again with **Spirit Lake.** Laid in the 1850s and concerned with the opening of the Iowa territory to the settlers, Kantor has succeeded in painting a large canvas with a delicate brush. His cast of characters, all vividly drawn, seems to run into the hundreds and, not only is he intent upon presenting this facet of history from the viewpoint of the white settlers but from the dispossessed Indians as well. Not a pretty story, but a strong one. Firmly recommended.



FIGHTING FLETCHER

According to the official records, *Fletcher* isn't really credited with sinking that cruiser during her first major battle. But, based upon her remarkable record, she very well could have, given the opportunity. One of the outstanding fighting ships of World War II, *USS Fletcher* (DD 445) was the first of more than 100 destroyers of her type. During that war, she took part in three surface campaigns, 31 separate anti-aircraft actions, five attacks on submarines and 16 major shore bombardments. Still on active duty as a DDE at this writing, she is the embodiment of the virtues of ruggedness and versatility to be found in destroyers as a type.

BUILT IN KEARNY, N. J., Fletcher was commissioned 30 Jun 1942, the first ship to bear the name of the late Rear Admiral Frank Friday Fletcher, USN, hero of the battle of Vera Cruz in 1914.

After her shakedown cruise the destroyer began her fighting career almost immediately. While she was engaged in gunnery exercises in the Guantanamo Bay area word was received that a large Allied convoy bound for Europe had been attacked by German submarines. Upon arrival at the area she gained a possible submarine contact and attacked with depth charges without observing any positive results. A short time later, however, she rescued over 100 survivors from a torpedoed merchant ship.

WITH MOST OF HER CREW green and inexperienced, *Fletcher* appeared in her first action while covering the landing of the Eighth Marines on Guadalcanal, Solomon Islands. It was here that she fired her first shot against the Japanese. In the ensuing days, the destroyer and her accompanying ships were under almost constant air attack. She mortally wounded her first enemy plane on 11 November and five more the following day, besides assisting in downing three other aircraft.

On the night of 13 November 1942, she participated in the Naval Battle of Guadalcanal in an attempt to prevent the landing of enemy reinforcements. The Japanese battleship *Hiei* was badly battered and was scuttled the next day, and two Japanese destroyers were sunk. The United States lost two cruisers and four destroyers. Of all the allied vessels engaged, *Fletcher* alone was undamaged.

It was this battle to which ADM Ernest J. King, USN, referred when he said: "The action, which lasted 24 minutes, and which was one of the most furious in history, was terminated when *Fletcher* torpedoed a heavy cruiser." (Later records do not confirm the attack by *Fletcher*, but the situation was

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Based upon the official ship's history, made available through the courtesy of the Ship's Histories Section, Naval History Division, Office of the Chief of Naval Operations.

so confused, that no one will really ever know.)

The "Battle of Iron Bottom Bay," as this was later called, was followed by the Battle of Tassafaronga, also in Solomon waters. That night *Fletcher* fired 10 torpedoes with unobserved results at a target believed to have been a Japanese battleship. Also that same night, 30 November - 1 December, the cruiser *Northhampton* (CA 26) was lost, and *Fletcher* rescued 42 of her officers and over 600 enlisted men.

After a short rest at Espiritu Santo, New Hebrides Islands, the *445* again engaged in bombardment operations at Munda and Guadalcanal against the "Tokyo Express." During the latter engagement she destroyed numerous Japanese landing craft. *Fletcher* operated in this area as a part of Task Force 67 throughout early 1943. On the afternoon of February 11th she scored her first underseas victory.

A Japanese submarine had been spotted by a cruiser's patrol plane which marked the area of contact. *Fletcher* moved to the area and attacked with accurately placed depth charges. After her depth charges had detonated, three explosions (one very violent) were heard and felt and a large air and oil bubble welled up from the surface of the water near the area of the depth charge slicks. Much debris was found in the vicinity and the oil slick, definitely identified as that of diesel fuel, finally spread in heavy concentration over an area about two miles in diameter. Since no further sound contact was gained after the initial attack, the submarine was credited with being destroyed.

The succeeding months up to June 1943 were taken up with what had become routine bombardments and air attacks. This included participation by *Fletcher* and her battle-seasoned crew in the night bombardment of Japanese installations and airfield facilities at Munda Point, New Georgia, Solomon Islands, on 5-6 March 1943; action during enemy air attacks on allied shipping in the Tulagi-Guadalcanal area on 7 April; and, on the night of 12-13 May, in another bombardment of Japanese supply, bivouac and troop concentration areas on Munda Point.

RESCUED—*Fletcher* picked up many survivors at sea.

In July 1943 *Fletcher* returned to San Francisco, Calif., for a month's overhaul period, and upon its completion was once more on her way to the Western Sea Frontier.

By this time the Allied forces were moving northward, and *Fletcher* left her familiar haunts around Guadalcanal and Tulagi to next operate in the Gilbert Islands. There she aided in covering several landings by U.S. forces and on the evening of 26 Nov 1943, while serving as a screening unit attached to Task Group 50.2 some 50 miles west of Tarawa Island, participated in repelling several torpedo attacks by Japanese aircraft.

Early in December 1943, *Fletcher,* attached to Task Group 50.3 operated against the Japanese-held Roi Island, Kwajalein Atoll, Marshall Islands, in conjunction with carrier-based Allied plane attacks.

After a period of yard overhaul and various drills and maneuvers in the United States, *Fletcher* sailed once more for Hawaii, performing convoy escort duty and arriving at Lahaina Roads, T. H.,

THE ACCURACY of *Fletcher's* gunners brought flaming death for numerous Japanese kamikaze aircraft.

USS FLETCHER TODAY is a proud old veteran which has served well and is still full of fight.

in January 1944. She didn't stay in port very long.

Shortly thereafter, as part of the Wotje Bombardment Group, Task Force 53.5, *Fletcher* steamed for Wotje Atoll, Marshall Islands, where she participated in the bombardment of Japanese airfields, dispersal areas, hangars, armament, and other shore installations on 30 Jan 1944.

The ship operated in the Marshall Islands area participating in bombardment and submarine screening activities through February and March, and in April 1944, she entered Milne Bay, New Guinea, to report to the Commander Seventh Fleet for duty.

Fletcher's participation in the New Guinea campaign involved about five months, and during that time she was under way continually, escorting amphibious forces to their beachheads and giving supporting fire when necessary.

ON THE NIGHT of 8 Jun 1944, *Fletcher* (in company with combined Task Forces 74 and 75) was snooping around the north coast of Biak Island, off New Guinea, in search of Japanese ships attempting to reinforce or evacuate their garrisons ashore.

A force of five Japanese destroyers was contacted.

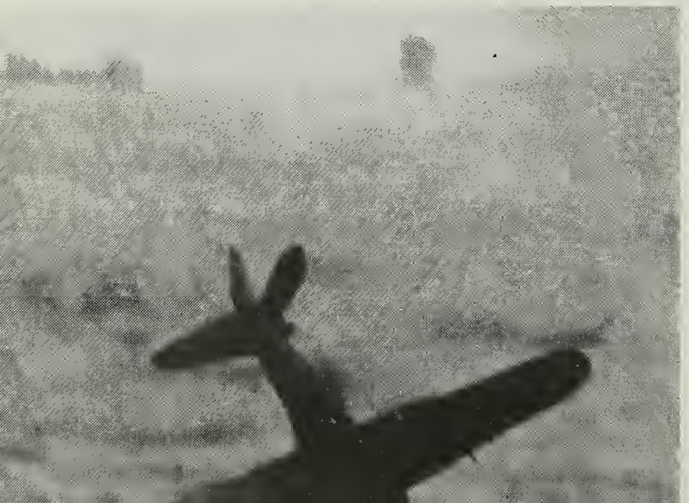
The enemy ships immediately changed their course toward Mapai Island at high speed.

Fletcher, with other ships of Destroyer Divisions 42 and 47, promptly gave chase, and in a short while *Fletcher* opened fire at an extreme range.

As the range slowly closed a large explosion was observed on one of the enemy vessels. The race continued for two and a half hours, until it was necessary to break off because of the proximity of enemy bases. During the entire chase the enemy emitted large quantities of black smoke which made visual observation very difficult.

No Japanese troops were evacuated from Biak that night.

NEAR MISS—An enemy suicide pilot dies in vain.



FOLLOWING THIS BRIEF ENGAGEMENT, *Fletcher* participated in landings on Noemfoor Island, Cape Sansapor and Morotai Island in the Halmahera area, giving supporting bombardment and anti-aircraft fire for the assault troops, as well as providing antisubmarine screening.

Next came the invasion of Leyte Gulf.

Fletcher arrived early on the morning of October 20th in company with a huge force of destroyers, attack transports and amphibious craft. The mission of Task Unit 78.2.6, of which *Fletcher* was flagship, was to provide protection for the attack force against enemy air and submarine forces en route and, upon arrival at the objective, to provide counter-battery fire against the west coast of Samar Island as well as anti-aircraft, antisubmarine and anti-torpedo screen in the assault area.

Sporadic enemy air attacks accompanied the invasion, and several times that evening *Fletcher*, along with one other ship off Samar, fired on enemy snooper planes which were evidently trying to find the main body of ships. While *Fletcher* was operating out of San Pedro Bay in Leyte Gulf, nightly air raids were common occurrences, as was daytime enemy air activity.

On the evening of December 5th *Fletcher* opened fire on a Japanese plane and a little over a minute later it was evident that the plane was attempting to crash into the destroyer.

Through effective gunfire and radical maneuvering of the ship the suicide attempt was frustrated. Instead the plane crashed into the water about 100 yards off the starboard bow.

THE LANDINGS at Ormoc Bay and Mindoro Island followed with the usual bombardments and air attacks, then on 5 Jan 1945 *Fletcher* got underway from San Pedro Bay, P.I., to participate in the invasion of Lingayen Gulf. Although *Fletcher* was not one of the ships to enter the Harbor, she patrolled with a carrier force to the northwest.

After Lingayen was secured, *Fletcher* participated in the landings at San Antonio, Nasugbu and Subic Bay, Luzon Island. It was in this area that *Fletcher* picked up SGT D. W. Kadolph, U.S. Army, who had been hidden by natives after his escape from a Japanese prison ship which had been torpedoed in December.

Northern Luzon was mainly in control of Allied forces and all that remained was Manila Bay and the surrounding area. During the period of February 13th through the 17th, 1945, *Fletcher,* as a part of Task Unit 77.3.2, participated in bombardment and minesweeper covering operations in this area, in support of the amphibious landings of Task Group 78.3 at Mariveles and Corregidor.

The landing at Mariveles was made on 15 February and at Corregidor on the following day. During this time it was necessary to silence numerous Japanese gun positions which sought to interfere with the assault landings. There was also the constant necessity of sinking floating mines which had been cut adrift by the U.S. sweepers. The activities of *Fletcher* included bombardment, counter-battery fire, and the rescue of survivors of *YMS 48* which was fatally hit by shore batteries.

IT WAS WHILE SHE WAS clearing out obstructions in preparation for the landing on February 14th that *Fletcher's* record was marred.

A six-inch shell from a hidden Japanese battery struck the ship, putting both forward guns out of action. The explosion occurred as the projectile passed through the main deck, and fragments killed three men at gun No. 1 and two men in the same gun's ammunition handling room, and wounded six others.

A WELL-PLACED depth charge ends an enemy sub.

BETWEEN BATTLES—Warships rest in quiet lagoon.

However, *Fletcher's* men were equal to the occasion and fire was immediately resumed, wiping out the offending battery. The ship then proceeded to pick up survivors of a minesweeper which had been hit by a similar shore battery. The crew was credited not only with outstanding heroism in putting out the fire caused by the hit, keeping the remaining guns firing, and attending the wounded, but also with a top maintenance and repair job. The damaged guns and other parts of the ship were fully repaired within six days, unassisted, in time for the next operation.

OPERATIONS AT Puerto Princessa on the Island of Palawan followed, and then Zamboanga. After the successful invasion of Mindanao, *Fletcher* then helped support the Australian landing at Tarakau, Borneo, silencing several shore batteries.

In early May 1945, *Fletcher* was ordered to return to the continental United States for overhaul.

During her World War II career, *Fletcher* earned 15 battle stars, rescued over 1000 survivors from five ships, five planes and one submarine; steamed over 200,000 miles in three years with only one major engineering casualty; and, in action against the enemy expended 20 torpedoes, 86 depth charges, 10,300 rounds of 5-inch/38-caliber ammunition (air, surface and bombardment), 7500 rounds of 40-millimeter and 3000 rounds of 20-millimeter ammunition.

In 1949 the ship was converted to DDE status. Her equipment and armament gave her the primary mission of tracking and killing submarines.

With the outbreak of the Korean conflict, Fletcher *joined the Seventh Fleet in the Far East and saw action at Inchon, Amgok, Sak To Island, Peppa Kotsu, Hosen, Nenjo Chi, Hungnam and Wonsan and added five more battle stars to her record of wartime activity.*

Now approaching her 20th anniversary, she is still in commission and on active duty. She is operating with the Pacific Fleet out of Pearl Harbor.

TAFFRAIL TALK

Even the weariest and most cynical news editor will admit that dog stories are sure-fire. Here are a couple of samples:

We invite your attention to USS *Blenny* (SS 324) which claims to be the only sub to have a four-legged snorkeling submariner. Bozo is his name and diving is his fame. He has earned his honorary twin silver dolphins by virtue of his snorkeling abilities and time aboard *Blenny*.

Bozo entered the Navy as a pup nearly four years ago when a sailor bought him in Yokosuka, Japan, for 100 yen. He became a crew member of USS *Benner* (DD 807).

While in *Benner*, Bozo was raised by Lieutenant (JG) Edward L. Kessler, Jr. They were constant companions until Mr. Kessler was transferred to the Submarine School at New London. Bozo stayed in *Benner* when Mr. Kessler left.

Upon completion of Sub School, LTJG Kessler reported to *Blenny*. On board to greet him was you-know-who, complete with service and health records.

Bozo, to date, has five Pacific crossings to his credit on board *Benner*, plus numerous Atlantic trips.

Occasionally, Bozo stays in port while *Blenny* is at sea. Somehow, he always knows when the ship is coming in and at what pier. He's always there to meet it and leaps aboard before the gangplank can be laid down.

★ ★ ★

However, Destiny — as it must — comes to even the most favored of creatures. We must report with sorrow that the last local survivor of the Battle of Kwajalein is dead.

Tinker, then a lively black and buff puppy, was with the Japanese forces when U. S. troops took the island back in 1944. After the Japanese surrendered, Tinker was cared for by U. S. servicemen through the years. He eventually became the mascot of the Navy Communications Center.

Tinker's photograph, alongside those of naval personnel, appeared on the command identification board at the entrance. Inscribed under the picture was — Tinker, age 19 plus (Chief in Charge of Dogs).

Floyd B. Smith, RMC, was Tinker's principal guardian but everyone saw to it that Tinker was well taken care of.

However, in the past few months, Tinker became completely deaf, lost the sight of one eye and at long last made his way to the canine counterpart of Fiddler's Green.

He was missed. This is what his shipmates had to say in *The Hourglass*, Kwajalein's station newspaper:

"Certainly, it goes without saying, we will all miss you around here from now on. We're sure Pudge, Charcoal and Sparky (all RMSNs) feel the same way about it. Your familiar "Wroof" will no longer echo down the hall amidst all the chaos and confusion that transpires in this place daily. We are sure that your tired old eyes are once again open and looking down upon us from the land of forever after. This time, Tinker, rest assured that they will never close again. Use them now in your eternal life among the other retired RMCs who made it there. May your wisdom blaze a trail for others to follow when it's their time to join you."

So that's why news editors like dog stories.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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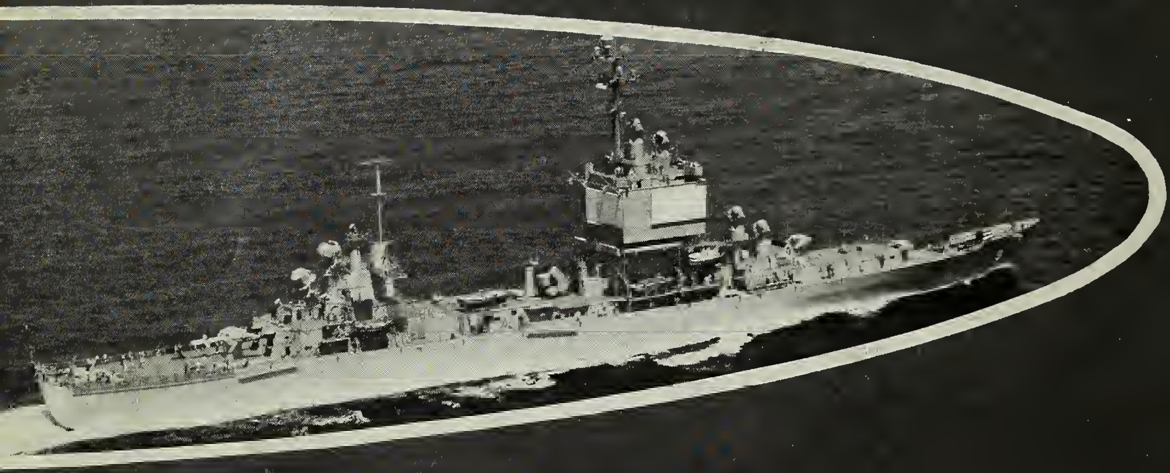
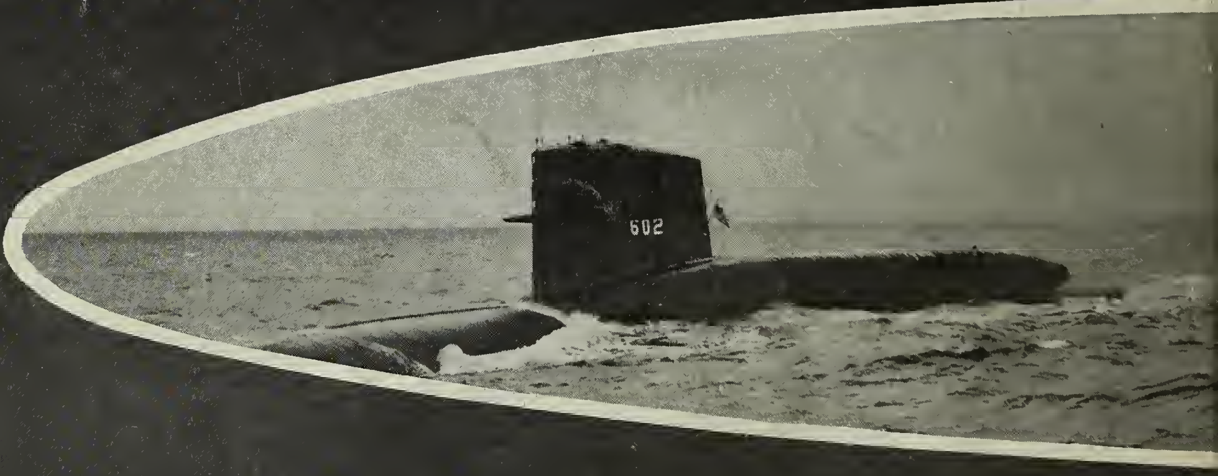
• AT RIGHT: SKILLS IN ACTION — Support personnel at the U. S. Naval Station, Argentia, Newfoundland, perform many tasks. Here F. D. Abel, AT2, USN, of VW-11, makes repairs to equipment in the maintenance shop of one of the station's hangars.

The ATOMIC ERA

well under way





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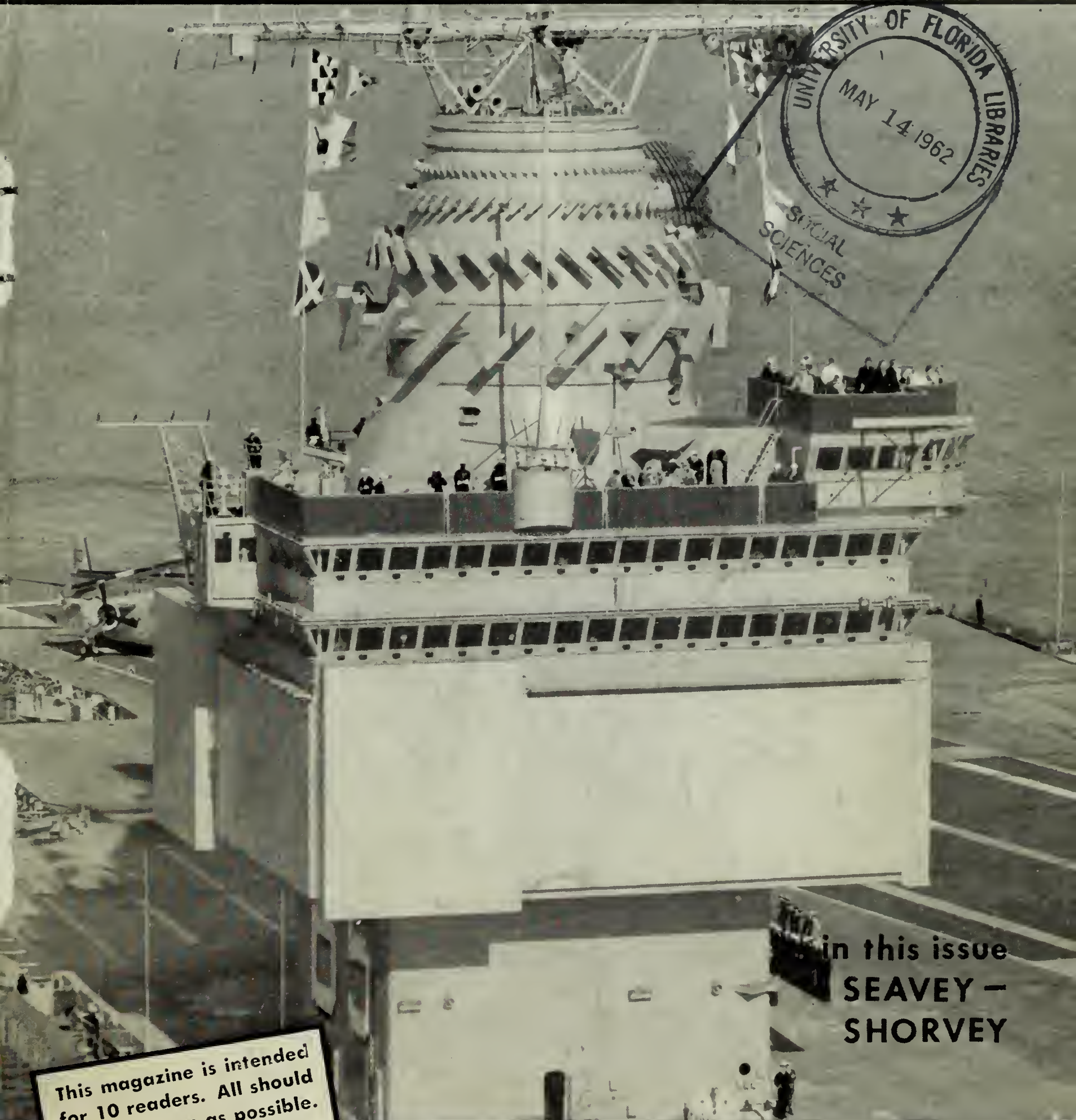

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THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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The Chief of Naval Personnel
REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel
CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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• FRONT COVER: SUPER SUPERSTRUCTURE — Blockhouse-like tower, the latest in carrier islands, is sported by nuclear-powered *USS Enterprise* (CVAN 65). The four rows of diagonal bars form part of the ship's radar system.

• AT LEFT: HAVING A BALL — Gaily decorated hangar deck of *USS Kitty Hawk* (CVA 63) becomes a dance hall for crew members and their dates as they dance to the music of the Fourth Naval District Band.

• CREDIT: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated. Photos on pages 2 to 5 by A. N. Galloway, JO3, USN.

INSIDE-OUTSIDE—Destroyer school students check boiler steam drum. *Rt:* Guns are studied aboard DD.

SCHOOL FOR DESTROYER

ALMOST ANY NAVYMAN who has served in a destroyer will tell you she is something like a wife. Sometimes he woos her; other times he cusses her, but woe to the man who says anything against her.

He knows there's nothing grand about her, and sometimes she gives him a hard time but, because of the nature of the gal, he gets to love her.

There is, of course, a reason for this. Unlike men in larger ships, every man on board a destroyer has an intimate knowledge of his ship's habits and her whims.

Every man on board, from the youngest enlisted man to the captain, knows most of his shipmates and he knows his skipper. His shipmates and his skipper know him.

Until fairly recently, Navymen and their destroyers have settled down together in different degrees of harmony and with varying degrees of preparation for their life together.

In July of last year, the Navy decided a little counseling might be advisable to promote mutual compatibility. To provide the counseling, the U. S. Naval Destroyer School at Newport, R. I., was established.

The idea for the school was born when Admiral Arleigh Burke was COMDESLANT, and it simmered and boiled while he was CNO. The plans were given the final push by RADM Charles E. Weakley, currently assistant CNO. The push was scarcely a gentle one – five months and six days after the school was authorized, it was open for business.

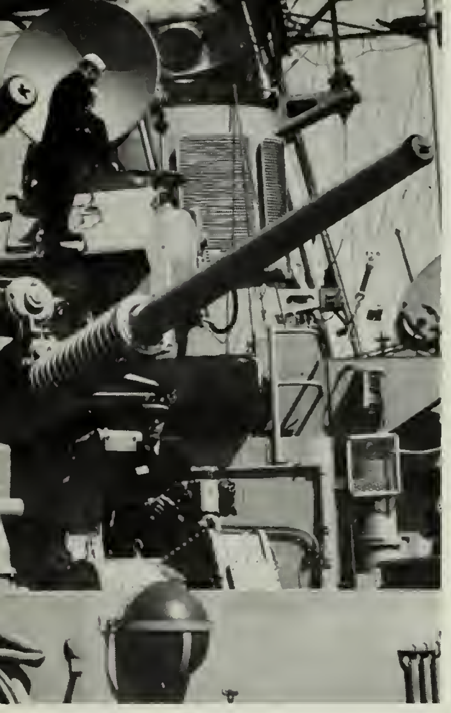
IN THIS SHORT TIME, a faculty was chosen, a curriculum was formulated, quarters were found and a student body was selected.

The faculty is composed of lieutenant commanders who have been executive officers on board destroyers and commanders who wear the Command at Sea insigne below their ribbons.

These and other knowledgeable destroyer officers and their chiefs formulated a curriculum for the school. It was coordinated with the education specialists at the Bureau of Naval Personnel and sent to the Fleet for comments from destroyer officers there.

With the exception of the curriculum for the engineering department and, to a degree, the gunnery course, the whole educational structure was built from scratch. The engineering curriculum was built upon the courses taught in what used to be

LIKE FOR REAL—Student officers man CIC mock-up for anti-air warfare.



CLASSES are held aboard ship.

MEN

the Afloat Engineering School which has now been discontinued.

The Destroyer School's quarters and much of its equipment had been used by the engineering school.

The Destroyer School also incorporated into its plant the shop used by the engineering school, which contains examples of the machinery found aboard a *Fletcher* class destroyer. Some of it is cut away so the students may have the benefit of a look at the equipment's insides.

WITH THE PHYSICAL LAYOUT for the school completed, students had to be supplied. Training was to be made available primarily for junior officers, but a short course was also scheduled for enlisted destroyermen (see below).

Finding available officers was not easy at this stage of the game. Many of the first class of 38 students (36 LTJGs and two LTs) were literally ordered off ships. In most cases, their duties had to be distributed among other officers because there was insufficient time to find replacements.

Members of the first class came to the school with the blessings and recommendations of their commanding officers, despite the sudden nature of their departures. They all had served at least 18 months in destroyers and had a minimum of two years of obligated active service.

CLOSE GROUP—Every destroyerman knows his own ship intimately.

The students are considered by the faculty to be highly motivated career men. When they graduate from the school, they will be qualified to serve as department heads in destroyers or will be potential department head material, depending on their rank and experience. Eventually, they may become destroyer execs and captains.

IN A NUTSHELL, this means the school seeks to achieve, through six months of intense practical education, what has until now, taken years of experience to accomplish.

Even after years in destroyers an officer would probably be expert in only one or, at best, two facets of destroyer operation. To be adequate in the areas in which he had little or no training he would, of necessity, be obliged to lean heavily on others in an area where he should stand alone.

After six months, the Destroyer School graduate is expected to be a

THE WORKS—Destroyer officers learn how to overhaul main feed pump.

GUN DIRECTOR is checked out on board *USS John Paul Jones* (DD 932).

competent executive and to be proficient in the areas of operations, weapons and engineering.

Since the students come to the school with varying degrees of proficiency in different areas, the instructors must be flexible. When they find a large segment of the class has had experience in a given subject, they tailor the course to meet the needs of the majority.

This means there will be some who don't get the full picture which the others already know by virtue of their previous experience. The only way the student can remedy this situation is to burn the midnight oil.

This explains why students spend about four hours daily in outside study, in addition to the 36 hours per week they spend in the classroom. To accommodate those who feel the need for extra work, the school has provided a well-stocked library in which a lamp is kept burning in the window until 2200 each night.

It isn't hard to see why destroyers are coming in for this attention. They have the reputation for being the toilers of the Fleet. More destroyers are being FRAMmed and guided missile destroyers are with us. The duties of senior officers have increased to the point where they no longer have sufficient opportunity to instruct their juniors adequately.

Owing to recurring world crises, there is little or no time for sending officers and crew members to service schools to be educated in the complexities of increasingly complicated destroyer equipment.

Unless a destroyerman is, like Superman, possessed of X-ray vision, he will have difficulty in seeing beyond the skin of a piece of machinery. The chances are he would never know how it really works. In battle conditions, this is not good.

The Navy seeks to avoid a situation in which lieutenants junior grade or ensigns with insufficient experience would become department heads. Under such circumstances, inadequately trained junior officers would be expected, in turn, to teach their juniors, who would become even less knowledgeable than their mentors.

Shore-based instruction, as provided by the school, seems to be the answer to these problems.

To provide the Navy with destroyer officers who have confidence in their ability and sufficient knowledge to be proficient in their jobs, the school has been divided into executive, operations, weapons and engineering areas.

The executive department teaches its students what every department head should know, without regard to any specific assignment. Here, the officer learns the Navy's place in world affairs and national security and his own leadership responsibilities.

Shipboard organization, administrative and supply procedures and standards are taught. He also learns some of the intricacies of naval jus-

CLASSY—Destroyer school students get the word in classroom session.

tice, ranging from commanding officers' non-judicial punishment to the details of a special court-martial.

As he progresses, the student is called upon from time to time to make oral presentations. He is also required to submit a 3000-word professional paper.

In the weapons area, the emphasis is again aimed at the potential department head. The curriculum is based on what used to be the DESLANT Afloat Gunnery Course, which was expanded to include new weapons, particularly such ASW items as *Asroc,* DASH and VDS.

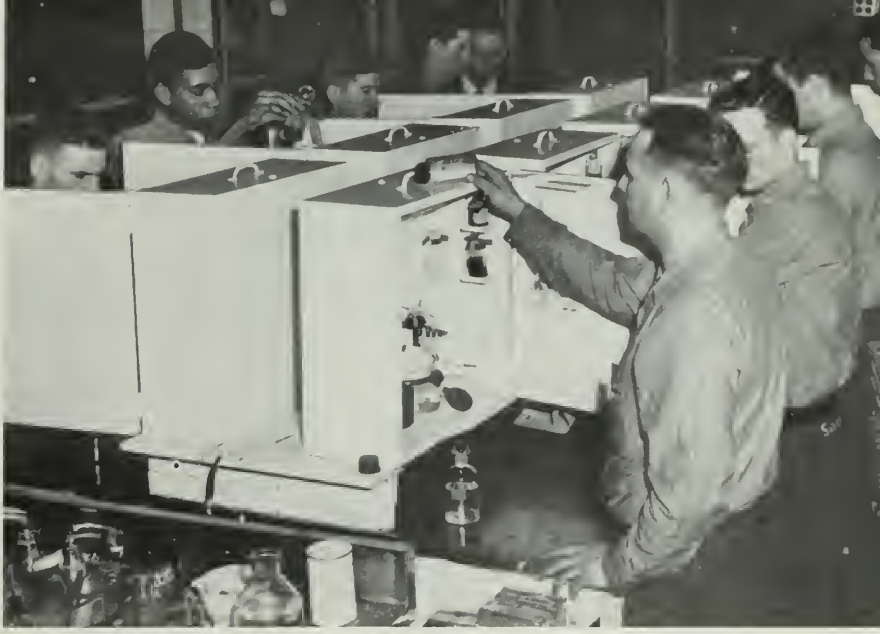
ONE OF THE LENGTHIEST courses is in engineering. It is down-to-earth and designed to give the student a firm grasp of practical subjects. Here the student learns the anatomy of a naval boiler and how to maintain and operate propulsion turbines. He is instructed in the intricacies of shipboard electrical, IC and service equipment and systems. He learns about engineroom and fireroom operation and what to do when his equipment is shot out from under him.

This instruction is given in the classroom and followed by a look at the actual equipment in the school's shop. Additional practical exposure is given on board the training ship.

In the operations course, the students take up such practical subjects as seamanship; navigation; ASW, AAW, ECM and ECCM; department planning, training and equipment maintenance; operations orders and plans; intelligence; weather; and communications. The latter includes crypto, message preparation, publication handling and accountability.

About one eighth of the student's time is spent on board one of the school's two training ships, USS *Abbot* (DD 629) or *The Sullivans* (DD 537). Here they fire basic DD competitive gunnery shoots including gunfire support at Culebra. They also devote about 77 hours to practical engineering work which, at times, becomes basic enough to send the student crawling through the ship's boilers.

He will also get his turn at bumper drills, exercise in leapfrog, man-overboard, underway replenishment and towing at sea. He also takes part in shore bombardment.


ENLISTED students receive practical training in boiler water testing.

IN ADDITION TO officer training, the school gives second and third class BTs, MMs and EMs a four-week course which takes full advantage of the engineering shop.

The enlisted men, as well as the officer students, have the benefit of a group of 13 chiefs who, their boss insists, form the best group of its kind in the Navy.

After seeing them in action, this is not difficult to believe. They are walking encyclopedias, and present their material in a way which ranges from solid to sparkling.

The enlisted students, in addition to doing their class work, spend considerable time in the engineering shop learning the fundamentals of the machinery there.

The chiefs say the shop equipment is enough like the machinery the students will find after they are assigned to make adaptation reasonably easy.

In the shop, the students brick boilers, tear down and rebuild pumps and, in general, acquire an education which could be obtained only in an installation of this type.

They are taught an appreciation of their work which stays with them when the going gets tough. As one chief said, pushing up his welder's mask, "Mister, tearing down a boiler is just plain hard work. You have to like what you're doing to stay with it."

Texts: Four Score and Three

Officer students at the U. S. Naval Destroyer School keep themselves busy with 83 texts which are issued to them during their six months at the school.

These are the kinds of books they study: Classified—27; Miscellaneous—7; Engineering—13; Operations – 17; Weapons – 8; and Executive—11.

DESPITE THE CONSIDERABLE NUMBER of destroyer enlisted men who study at the school it exists mainly to educate department heads. Since it is new, there is considerable interest in the returns the Navy is receiving on its investment of time and personnel.

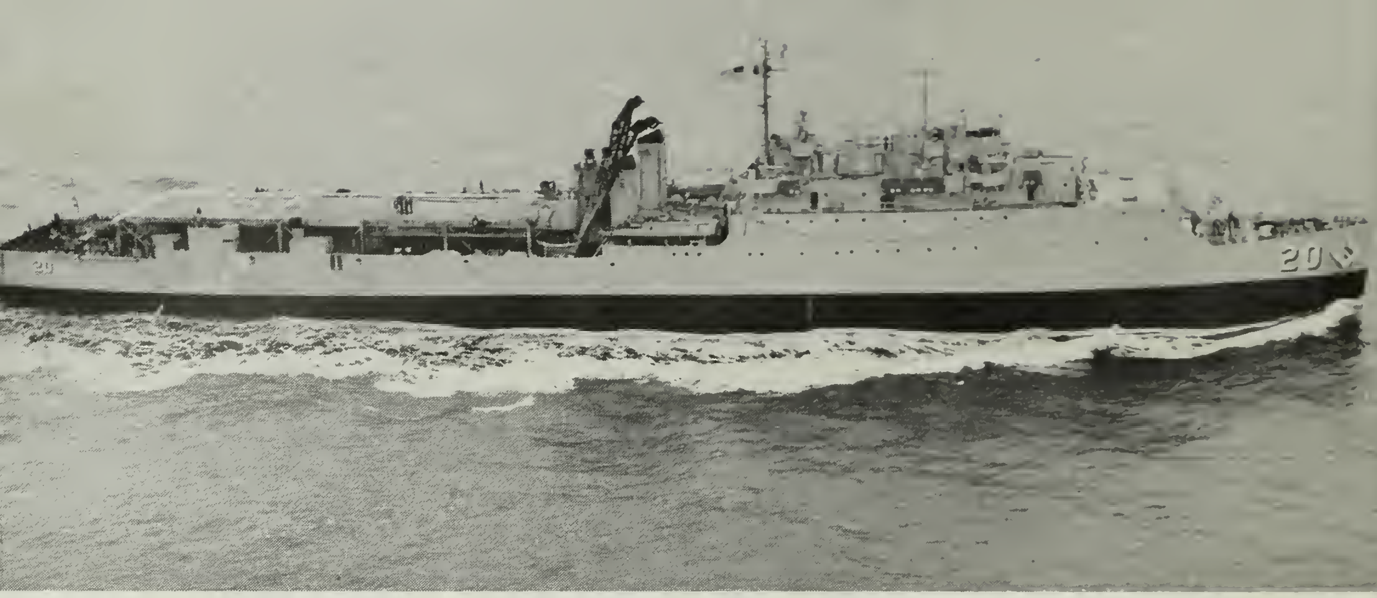
As yet, the results are not in. The effectivenes of the school can't be judged until the first class graduates in July and goes out to the operating Fleet.

Even then, the proof will hardly be conclusive until the school begins turning out its 200 to 240 graduates each year. Only at that time will it become evident whether or not the destroyer force possesses department heads who are more capable than their predecessors.

It is immediately evident, however, that the first class of 38 students, which entered in January, and the second class, which began its studies in April, have quite obviously learned a lot they didn't know when they reported – also that the enlisted men who take the four-week course have learned things about their ratings which would be difficult, if not impossible, to learn in any other way.

Even at this early date, the feeling seems to be that the school will be a success and the destroyer force will be the winner for its efforts.

— Robert Neil.



This Can't Be My Old

WHAT'S THE PICTURE on FRAM these days?

FRAM's doing the job it was, and is, intended to do — and doing it very well, thank you. And that's good news for the Navy.

That's not just an opinion, either. It's being solidly demonstrated in day-by-day Fleet operations by veteran ships enjoying a fresh lease on life through the FRAM (Fleet Rehabilitation and Modernization) program.

Take the Atlantic Fleet destroyer USS *Perry* (DD 844) for example. *Perry*, the FRAM Mark I prototype, just recently observed the first anniversary of the completion of her FRAM overhaul, and her return to active duty with the Fleet.

The record shows that she's steamed for a full year without a serious material failure. AOLs are down, reenlistments are up — a sure sign of a happy crew. In her 15th year of active service — at a time when she would normally be at or very near the end of the line — *Perry* has gained a second wind which will mean up to eight more years of productive service to the Navy. She boasts vastly increased capabilities, too.

SOUND GOOD? It is — but before we go any further into the FRAM story, let's get one point clear.

There is danger, with FRAM, as with almost any other good idea which works as it is supposed to work, in becoming oversold on its advantages and capabilities, and in ignoring or overlooking its very obvious limitations.

FRAM isn't, nor does it pretend to be, anything more than a stopgap — an admittedly effective one, but just a stop-gap. It can, under certain circumstances and in certain areas, substitute for new ship construction on a short-term basis — and as such, it has proved to be a savior, especially to our ASW forces. But it can never hope to function as a permanent replacement for required new construction.

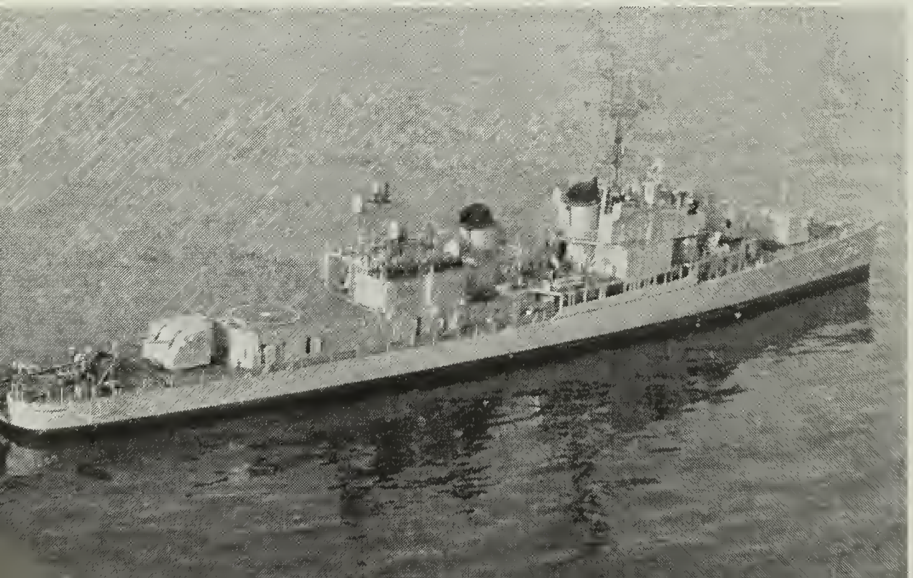
Keeping this firmly in mind, a little background information on the FRAM program might prove helpful here.

Perry, while first, is by no means the only case in point.

Some 70 ships have received the FRAM treatment thus far — nearly two-thirds of them destroyer types. Another 40 are scheduled for completion during 1962. Thirty-six of these, all DDs, have received, are receiving or will receive the extensive Mark I face-lifting. The remainder have been, are being or will be given the less extensive four-to-six-month Mark II overhaul. There'll be more on the distinction between the two types of programs later.

EVERY STORY has a beginning — and in FRAM's case it begins in the late 1950s, when the Navy came to grips with a king-sized dilemma.

NEW LEASE ON LIFE—Crew of *USS John W. Thomason* (DD 760) get used to look FRAM gave their ship while cruising off California coast.



Ship!

Briefly, many of its ships were wearing out. What was worse, since most had been built at approximately the same time, they showed every sign of wearing out together, too. Block obsolescence was just one term used to describe a situation which was rapidly assuming alarming proportions in a Navy charged with far-ranging responsibilities and commitments such as ours.

The item which really made the situation bad, though, as far as the Navy was concerned, was money – more specifically, the lack of same.

Money, as most of us know only too well, will only stretch so far. In a Navy concurrently eyebrows-deep in the costly business of producing the *Polaris* missile, FBM submarines, several other classes of missiles, a nuclear-powered aircraft carrier, several other supercarriers, ever bigger, better and faster jet aircraft, guided missile cruisers, plus a lot more assorted hardware, it's small wonder that budgetary limitations just wouldn't permit enough added new-ship construction to replace the soon-to-be-worn-out ships.

THERE WAS A DEFINITE morale factor involved, too. Officers and EMs alike, no matter how dedicated and motivated, were becoming increasingly frustrated with wrestling ships and gear which needed constant nursing and repair. They were well aware, moreover, that much of the armament, electronics detection and weapons systems they were struggling along with were almost hopelessly antiquated and outdated, and that the main propulsion systems of their ships could not operate efficiently, presenting the constant risk of a major failure.

The problem was particularly acute in the destroyer forces, where more than 80 per cent of the destroyer types then in commission were more than 15 years old, and going downhill fast. Even the traditionally high esprit de corps of the tincan Navymen was beginning to fray under the twin strains of worn-out ships and poor habitability.

It was during this same general period, too, that the Navy was giving A-1 priority to a build-up of its antisubmarine warfare forces – yet a good many of the ships involved in the ASW field were in the aged-and-infirm category.

It was, unarguably, a bleak outlook. The Navy rolled up its sleeves and went to work to find what would be the best possible solution to this big problem–and big it was.

OPERATION FRAM—*USS Sumner County* (LTS 1148) gets the works.

SECNAV took the first step when he appointed a special advisory group to look into the situation. It wasn't long before that group came up with some concrete conclusions:

They decided that:

- In the case of the majority of the aging ships, the basic hulls were still in reasonably good condition.

INSIDE JOB—New CIC for destroyers is included in their modernization.

TENDERS TOO—Destroyer tender *USS Dixie* (AD 14) is among those that have received FRAM treatment.

- The hull is the most important part of a vessel which intends to stay afloat. It is also the single most expensive part of a ship.
- A like-new ship could probably be built on an existing hull for approximately one-third the cost of an entirely new ship.
- Such a partially rebuilt ship would probably then enjoy an added effective operating life of somewhere between five and ten years.

In the end, such considerations and conclusions spotlighted a crying need for some kind of an extensive Fleet rejuvenation program. It evolved, shortly, as FRAM.

As mapped out by BuShips experts, FRAM was, and is, divided into two separate and distinct classes of overhaul — Mark I and Mark II.

The *Gearing* and *Thomas* classes of destroyers, with their 14 feet of additional length and greater cruising radius, are considered more adaptable for — and get — Mark I. The older and smaller *Sumner, Greene* and *Fletcher* classes are Mark II'd.

FRAM Overhaul Completed

Ship	Fleet Attached To	Ship	Fleet Attached To
Mark I		**DeHaven (DD 727)**	**Pacific**
Perry (DD 844)	**Atlantic**	**Mansfield (DD 728)**	**Pacific**
Agerholm (DD 826)	**Pacific**	**Hugh Purvis (DD 709)**	**Atlantic**
Noa (DD 841)	**Atlantic**	**Radford (DDE 446)**	**Pacific**
Stribling (DD 867)	**Atlantic**	**Lowry (DD 770)**	**Atlantic**
Shelton (DD 790)	**Pacific**	**Stormes (DD 780)**	**Atlantic**
Bausell (DD 845)	**Pacific**	**Jenkins (DDE 447)**	**Pacific**
Meredith (DD 890)	**Atlantic**	**Lyman K. Swenson (DD 729)**	**Pacific**
Richard B. Anderson (DD 786)	**Pacific**	**Blue (DD 744)**	**Pacific**
William C. Lawe (DD 763)	**Atlantic**	**Kenneth D. Bailey (DDR 713)**	**Atlantic**
Mark II		**Yosemite (AD 19)**	**Atlantic**
Frank Knox (DDR 742)	**Pacific**	**Fulton (AS 11)**	**Atlantic**
Duncan (DDR 874)	**Pacific**	**Nereus (AS 17)**	**Pacific**
Ernest G. Small (DDR 838)	**Pacific**	**Fort Marion (LSD 22)**	**Pacific**
Alfred A. Cunningham (DD 752)	**Pacific**	**Oak Hill (LSD 7)**	**Pacific**
O'Brien (DD 725)	**Pacific**	**Donner (LSD 20)**	**Atlantic**
Keppler (DDE 765)	**Atlantic**	**Casa Grande (LSD 13)**	**Atlantic**
Fred T. Berry (DDE 858)	**Atlantic**	**Belle Grove (LSD 2)**	**Pacific**
Frank E. Evans (DD 754)	**Atlantic**	**Carter Hall (LSD 3)**	**Pacific**
Walke (DD 723)	**Pacific**	**Shadwell (LSD 15)**	**Atlantic**
Norris (DDE 859)	**Atlantic**	**Cabildo (LSD 16)**	**Pacific**
Lloyd E. Thomas (DDE 764)	**Atlantic**	**Colonial (LSD 18)**	**Pacific**
McCaffery (DDE 860)	**Atlantic**	**Fort Mandan (LSD 21)**	**Atlantic**
Allen M. Sumner (DD 692)	**Atlantic**	**Holmes County (LST 836)**	**Pacific**
Moale (DD 693)	**Atlantic**	**Sumner County (LST 1148)**	**Pacific**
Ingraham (DD 694)	**Atlantic**	**Polk County (LST 1084)**	**Pacific**
Harwood (DDE 861)	**Atlantic**	**Stone County (LST 1141)**	**Pacific**
John W. Thomason (DD 760)	**Pacific**	**Dixie (AD 14)**	**Pacific**
Zellars (DD 777)	**Atlantic**	**Prairie (AD 15)**	**Pacific**
Charles S. Sperry (DD 697)	**Atlantic**	**Sperry (AS 12)**	**Pacific**
Massey (DD 778)	**Atlantic**	**Orion (AS 18)**	**Atlantic**
Nicholas (DDE 449)	**Pacific**	**Randolph (CVS 15)**	**Atlantic**
Robert K. Huntington (DD 781)	**Atlantic**	**Princeton (LPH 5)**	**Pacific**
Turner (DDR 834)	**Atlantic**	**Tiru (SS 416)**	**Pacific**
Goodrich (DDR 831)	**Atlantic**	**Greenfish (SS 351)**	**Pacific**
Collett (DD 730)	**Pacific**	**Trumpetfish (SS 425)**	**Atlantic**

IN A TYPICAL MARK I OVERHAUL, a destroyer enters a shipyard in Boston, Norfolk, Bremerton, Long Beach or any of half a dozen other locations. Her main deck is cleared of after deckhouse, guns and all other topside equipment. Access holes are cut in the main deck, through which interior machinery, equipment and fittings can be removed.

Some 10 to 12 months, and some millions of dollars later, when the same ship emerges from the shipyard for her post-overhaul shakedown, she looks sharp, feels sharp and is sharp — and she's crammed with the latest and most up-to-date gadgetry designed to make life miserable (and short) for hostile submarines.

For example:

A completely new deckhouse (of aluminum) is built and fitted onto the hull. Only two 5-inch, and no 3-inch guns are put back in place. A new and larger weatherproof bridge is installed. The enclosed area of the 02 level is enlarged to include the space where the three-inchers had been mounted. Into this enlarged area goes a new "modular" (literally, functional and flexible) CIC, boasting the very latest innovations and improvements in radar and electronics systems. Radio Central is more than doubled in size.

Asroc launchers are installed amidships on the 01 level. Flanking them are Mark 25 and Mark 32 torpedo tubes.

Then there's DASH.

DASH is the Drone Antisubmarine Helicopter, a compact, remote control weapons system which represents an entirely new and exciting concept in the field of long-range submarine killing. Steered and controlled remotely, it can carry an acoustic homing torpedo or a conventional depth charge out to the area of contact, drop its payload when ordered to do so, and return.

The drone helicopter itself is not expected to become operational with the Fleet until sometime later in 1962. Meanwhile, however, its hangar, launching and retrieving pad, and control equipment have been, and are being, installed aboard.

LONG ARM—Addition of torpedo-carrying helicopters to DDs under the modernization program makes it possible to kill subs far from the ship.

OTHER TOPSIDE CHANGES include a new after-mast sprouting new antennas and other electronics devices, and heightened stacks.

A FRAM overhaul job also goes into livability items. Additions and modifications to berthing, messing and work spaces are designed to provide greater crew comfort and higher morale. The long-range objective: Increased efficiency and effectiveness.

More berthing space has been acquired through the elimination of one 5-inch mount and handling room. Offices and staterooms are enlarged. Lighting and ventilation systems are renewed and increased. Air conditioning is installed.

Engineering spaces get a thorough going-over. All worn or obsolete parts and units are rebuilt or replaced to conform to new-ship performance specifications. The output of the ship's service generators is upped, mainly to carry the additional load imposed by the new electronics systems. New electrical cabling is run throughout the ship where required. All main auxiliary steam lines are renewed. Hull piping is redesigned. A salt-water washdown system (for ABC passive defense) is installed. Bulkheads and fittings are reconstructed to restore complete watertight integrity.

ASW destroyers are expected to be both hunters and killers — and the installation of new and juiced-up sonar systems is an important step in FRAM overhaul procedure.

Mark I destroyers get the new AN/SQS23 hull sonar, sound-dampened by a new method of installation which reduces noise level considerably. It produces a power output several times greater than that of any previously in use, making possible positive contacts at greatly increased ranges.

SOME PRINCIPAL DIFFERENCES in the destroyer Mark II program, besides the time (four to six months) involved, and the amount of money expended are:

- Repair, more than replacement,

SUPER SNOOPER—Variable depth sonar that can seek out subs from below the surface is added to DDs.

FRAM BELOW—*USS Tiru* (SS 416) has new life. *Rt: USS Nichols* (DDE 449) is back with better ASW gear.

of components is emphasized.

- The AN/SQS4 sonar is retained. In addition, Mark II ships are fitted with VDS (Variable Depth Sonar.) A transducer encased in a vaned pod, it can be trailed behind a ship and powered and controlled through a cable. It can be trailed at any reasonable desired depth, and echo-range beneath the thermal barrier, a favorite hiding place for lurking submarines.
- No *Asroc,* but two Mark 32 and two Mark 25 torpedo tubes. (Mark II ships also lose all 3-inch guns, but retain all three 5-inchers.)

We've already mentioned that only the *Gearing* and *Thomas* classes of destroyers receive Mark I, while several different classes of destroyers, plus other types of combatant and non-combatant ships are involved in the Mark II program.

These include:

Antisubmarine warfare support aircraft carriers (CVS)
Amphibious assault ships (LPH)
Destroyer tenders (AD)
Submarine tenders (AS)
Tank landing ships (LST)
Dock landing ships (LSD)

ALL OF THESE get a good deal of the rehabilitation, renewal and repair the destroyers do, plus new and improved equipment and facilities to improve and enlarge their special capabilities.

CVSs, for instance, receive improved air search radar; early warning and intercept equipment; a new

Ships Undergoing FRAM Overhaul in 1962

Ship	At	Completion Date (Scheduled)
Mark I		
Power (DD 839)	Charleston	Jan 1962
Charles R. Ware (DD 865)	New York	Jan 1962
Theodore E. Chandler (DD 717)	San Francisco	Jan 1962
Warrington (DD 843)	New York	Feb 1962
Hollister (DD 788)	Bremerton	Feb 1962
Samuel B. Roberts (DD 823)	Philadelphia	Mar 1962
Ozbourn (DD 846)	Bremerton	Mar 1962
Joseph P. Kennedy, Jr. (DD 850)	New York	Mar 1962
Arnold J. Isbell (DD 869)	Bremerton	Mar 1962
Forrest Royal (DD 872)	Boston	Apr 1962
Henderson (DD 785)	Mare Island	Apr 1962
Brinkley Bass (DD 887)	Bremerton	Apr 1962
Charles H. Roan (DD 853)	New York	May 1962
Gearing (DD 710)	Boston	Oct 1962
Wiltsie (DD 716)	Pearl Harbor	Oct 1962
Johnston (DD 821)	Boston	Oct 1962
Mark II		
Boxer (LPH 4)	Norfolk	Feb 1962
Catamount (LSD 17)	Long Beach	Feb 1962
Howard S. Gilmore (AS 16)	Charleston	Apr 1962
Kearsarge (CVS 33)	Bremerton	Apr 1962
Borie (DD 704)	Norfolk	Jun 1962
Wallace L. Lind (DD 703)	Norfolk	Jul 1962
Lofberg (DD 759)	San Francisco	Jul 1962
Buck (DD 761)	Long Beach	Jul 1962
John A. Bole (DD 755)	San Francisco	Aug 1962
Chevalier (DDR 805)	Long Beach	Aug 1962

FRAMMED AS can handle SSNs.

FRAM extends useful life of ships.

Overhauls Starting in First Half of 1962

Ship	At	Starting Date (Scheduled)
Mark I		
Hamner (DD 718)	San Francisco	Jan 1962
Robert H. McCord (DD 822)	Boston	Feb 1962
Vogelgesong (DD 862)	Boston	Mar 1962
Harold J. Ellison (DD 864)	New York	Mar 1962
John R. Craig (DD 885)	San Francisco	Mar 1962
Cone (DD 866)	New York	Mar 1962
Floyd B. Parks (DD 884)	Bremerton	Apr 1962
James E. Kyes (DD 787)	Bremerton	Apr 1962
Eversole (DD 789)	Bremerton	May 1962
Sarsfield (DD 837)	Boston	Jun 1962
Glennon (DD 840)	Boston	Jun 1962
Mark II		
Essex (CVS 9)	New York	Jan 1962
James C. Owens (DD 776)	Charleston	Feb 1962
Taussig (DD 746)	Long Beach	Feb 1962
Laffey (DD 724)	Norfolk	Feb 1962
Strong (DD 758)	Charleston	Mar 1962
Douglas H. Fox (DD 779)	Norfolk	Mar 1962
Perkins (DDR 877)	Long Beach	Mar 1962
Sierra (AD 18)	Norfolk	Apr 1962
Rushmore (LSD 14)	New York	May 1962
Outagamie County (LST 1073)	San Diego	May 1962
Ault (DD 698)	Boston	Jun 1962
Waldron (DD 699)	Norfolk	Jun 1962
Benner (DDR 807)	Long Beach	Jun 1962
Putnam (DD 757)	Norfolk	Jun 1962
Everett F. Larson (DDR 830)	Long Beach	Jun 1962

antenna system (with emphasis on ship-to-air UHF); an aviation electronics workshop; an improved CIC (including closed-circuit TV); and larger capacity CCA equipment.

Destroyer tenders get the increased space and new equipment necessary for the support and repair of modern firepower, including DASH and *Asroc.* Sub tender overhaul is aimed at furnishing them with nuclear repair and support capabilities. The LST and LSD FRAM programs show a heavy emphasis on improved communications equipment.

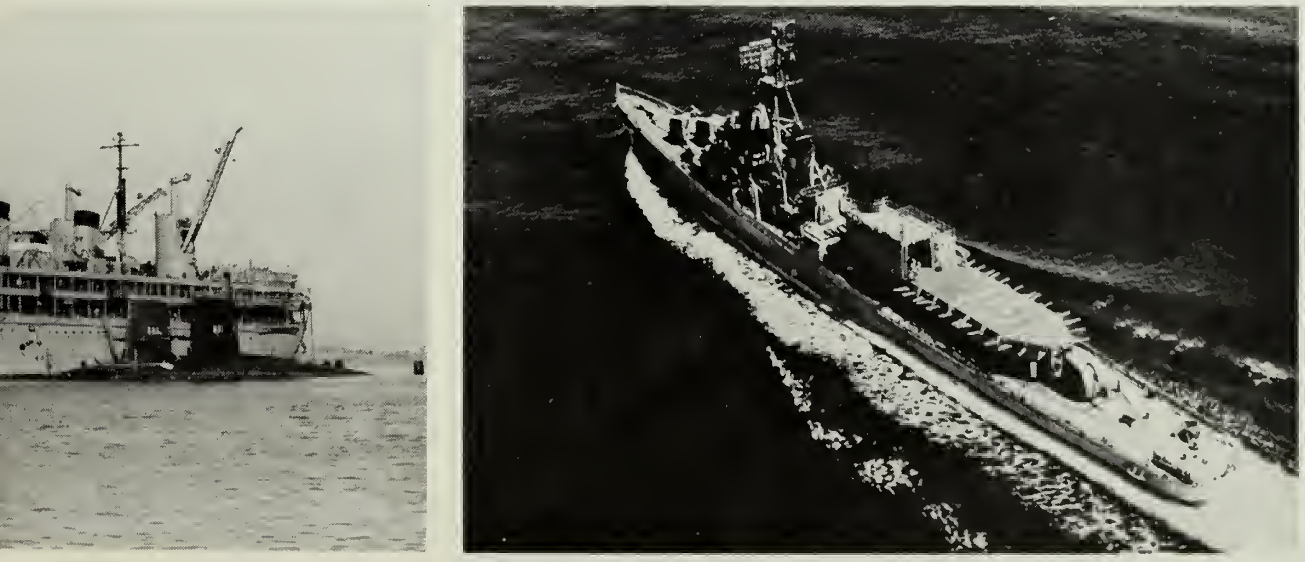
FRAM hasn't been all peaches and cream by any means — programs of the size and scope of this one seldom are.

While undergoing overhaul, ships are out of the operating schedule for six months to a year, forcing a reduced number of ships to perform the ever-increasing duties of the entire force. This problem figures to ease off considerably in the immediate future, however, as more and more ships complete their FRAM sessions and rejoin the Fleet. New construction — the DDGs, DLGs and new-class DEs — will help too.

FRAM has grown so far beyond its original concept that it's hard to say right now where it may all end. BuShips officials hope, however, to have all of those ships capable of being FRAMmed all FRAMmed by the late 1960s. Meanwhile, *Perry, Thomason* (DD 760) — the Mark II prototype — and their sister original graduates of the modernization program will continue to hold that line.

— Jerry McConnell, JO1, USN.

ATOM ABILITY—*USS Orion* (AS 18) now can tend nuclear subs. *Rt: USS Hazelwood* was early FRAM job.



Return of the Weekend

CONGRATULATIONS ON ACHIEVING THE HIGHEST MONTHLY FLIGHT HOUR TOTAL WEST COAST. CONSIDER THIS AN OUTSTANDING PERFORMANCE AFTER ONLY TWO MONTHS ON ACTIVE DUTY.

This "well done" message was dispatched to Patrol Squadron 872 from Commander Naval Air Forces Pacific Fleet. VP-872 is one of 18 Naval Air Reserve Squadrons ordered to join the Fleet last fall.

During its high flying month, the squadron flew a total of 650 aircraft hours–including almost 6000 pilot and aircrew hours – taking part in ASW barrier patrols, Fleet exercises, gunnery and training flights.

VP-872's accomplishment comes as no surprise to old-timers, however. The squadron has been a top operational unit for many years. During the past three years, it's been among the top five VP squadrons in the Naval Air Reserve's Noel Davis Trophy competition.

The squadron as a unit dates back to 1946, when it originated as an organized Reserve unit, training at NAAS Livermore, Calif. In late 1946, the unit was transferred to NAS Oakland, redesignated VPML-52, and assigned PV-2 *Harpoon* aircraft. In 1949, the squadron was redesignated VP-872.

In March 1952, individual members of the squadron were recalled to active duty to augment other Reserve squadrons and Regular units of the Fleet; these men served in the Korean conflict.

MOTORING—Members of Crew Six, VP-872, work on engine of P2V.

During this same period, VP-872 began the transition to P2V-type aircraft. This plane, known as the *Neptune*, is multi-engined, having two reciprocating engines and two jet engines. It is a land-based patrol bomber, carrying equipment capable of detecting and destroying submarines whether the subs are cruising on the surface or submerged.

The Reservists got together one week end each month for training drills. Once a year, the unit reported for two weeks' active duty for training. While most of these cruises took place at Stateside air bases, the squadron also made overseas flights. In 1959, VP-872 trained at Rota, Spain, making flights to France, Italy and North Africa. The following year, the squadron spent most of its two-week cruise in Puerto Rico, with a side trip to Panama. VP-872 has also made long-range flights to Hawaii and Cuba.

When NAS Oakland was decommissioned, the squadron moved — along with 30 other units — to NAS Alameda, where it came under the command of the Naval Air Reserve Training Unit.

VP-872's mission is antisubmarine warfare. Each of the unit's 12 P2V5F *Neptunes* is a mass of electronics equipment. One of the major items is the magnetic airborne detector (MAD). This sensitive piece of gear measures changes in the earth's magnetic field caused by a large metal object–such as an enemy submarine lurking beneath the surface. Other detection equipment includes sonobuoys, which are small hydrophones equipped with radio transmitters used to relay submarine noises to the searching aircraft.

The squadron was undergoing ASW training at NAS Los Alamitos, Calif., during its 1961 ACDUTRA cruise, when it got the word that it had been ordered to active duty in the partial mobilization that began last October.

Thus, while the order to report to join the Fleet may have come as a surprise to squadron members, they

Warrior

ON PATROL—Reserves called to active duty get set for a patrol flight.

were not unprepared. They were "up" on their mission, and as members of the Selected Reserve, each Reservist had mobilization orders in his pocket.

When recalled, VP-872 was at full complement as a Reserve unit. Now an operational Fleet squadron, it is nearly three times its original size, having been augmented by personnel from VP-875, NAS Alameda, and VP-701 and VP-702, NAS Dallas, Tex. Some individual Reservists were called from other Weekend Warrior units and from personnel attached to NAS Dallas and NAS Alameda to fill special squadron needs.

That first afternoon, a Sunday, saw the squadron personnel move into new facilities at NAS Alameda. Early the next morning the mechanics and technicians were busy at the task of receiving aircraft designated for VP-872's use.

The first plane was accepted on 3 October, and acceptance checks have been the order of the day since then as 11 more planes were added to the roster.

While all of this was going on in the maintenance department, the administrative personnel had problems of their own. Such matters as pay records, leave requests and medical records were new to this department, since these details had been handled previously by the NARTU for all of its Reserve units. This new "education" was accomplished quickly, since men had to be paid, others were reporting on sick call, and records had to be brought up to date.

At the same time, the squadron began to receive office furniture and equipment, along with instruction books, bulletins, report forms, supply chits, cleaning gear and everything else needed to put the squadron in a position to run its own operation. Mess cooks had to be selected, training courses set up, duty sections established, watches set.

All the while, of course, the operations department was working to see that duties and missions of the squadron were performed correctly and on schedule.

The squadron's first flight as an active duty unit took place on 3 October, when a P2V5F — which came to VP-872 from NAS Seattle —was flown on an acceptance flight. The first barrier patrol was flown on 12 October.

The ASW barrier patrol is an assignment to seek out and — sometimes — destroy enemy submarines en route to the target areas. These are all-weather patrols, and can last up to 12 hours, depending upon the assignment. These 12 hours do not include the briefing, the pre-flight aircraft check and the de-briefing. It can be a long day or night.

Nevertheless, VP-872's morale is quite high. The squadron is composed of Reservists from many walks of life. The skipper, CDR Edward R. Roberts, USNR, headed an electronics supply company before he assumed command. Some members worked in civilian capacities at NAS Alameda. Others are recent high school graduates.

Many members saw duty during World War II and are approaching 20 years of active and inactive duty. A number also saw action in Korea. And more than a few took part in both World War II and the Korean conflict, making this their third time around. Others, of course, are having their first taste of active duty; to these men, the "old-timers" seem quite old.

Squadron members who, as civil-

WEEKEND WARRIORS and their planes were ready when the call came.

AIRCRAFT STATUS BOARD shows 'most everything. *Right:* Aviation storekeeper checks over requisitions.

ians, worked with Overhaul and Repair (O&R) at NAS Alameda were particularly useful during the early stages of recall. These men—13 in all—were familiar with the base, the various activities, and how to process the maze of paperwork necessary for supply, for maintenance and for general housekeeping and operation. Inasmuch as NAS Alameda includes more than 1600 acres of land, approximately 290 buildings and 31 miles of roads, it's pretty handy if you know your way around. The O & R men knew where to touch base — whom to call, where to get things done quickly and well.

Under the direction of the aircraft maintenance officer, the squadron's maintenance department is operating under a crew concept. Each of the 12 crews is assigned an aircraft. This plane is their responsibility. The crew members must keep all of the equipment in an operating status and pull the necessary checks and overhauls. While different flight crews may take the plane up, the responsibility for its operational status rests with the assigned ground crew.

Any trouble in the miles and miles of electrical circuits in the aircraft are dropped in the lap of the avionics department. There are more than 4000 pounds of electronics gear in the *Neptune*, often called an "electronic warehouse." It's up to the avionics personnel to ferret out any electrical or electronics problems and make the necessary repairs or adjustments.

The pilots and aircrews make up the squadron's "heart." There are 12, 11-man aircrews. These men are burdened with flight gear, navigation kits, binoculars, ASW packets, hard hats, survival equipment, sex-

IN SHAPE—*Left:* Spotlight is checked prior to ASW mission. New *Neptune* gets squadron designator.

tants and classified material. They perform the mission of ASW warfare. It is their task to sit through complicated briefings, to "pre-flight" the aircraft, to operate the complex electronics equipment, and to bring the plane back after a successful search and mission. When they are flying, there are just a few places where aircrew members can stand and stretch. Most of the time is spent manning a position with full attention. On tough flights, the pilots may never leave their seats.

As might be expected, flight schedules and patrols do not respect holidays or week ends. Patrols are flown regardless – and a back-up crew must be available to take over if needed.

It would not be accurate to say that this business of mobilization was accomplished with no aches or pains. The speed of activation presented many problems. Supplies and equipment were available, but had to be ordered correctly. Mandatory attendance at schools meant lost week ends, extra watches and many collateral duties. Sometimes there just weren't enough bodies to go around.

During this transitional period, one busy Reservist offered the wry comment, "I'm sorry that I have only one wife to give to my country."

The many good times the men shared as inactive duty Reservists training together in many parts of the world contributed greatly to the squadron's high spirits.

Tall tales are still being told of exploits in Spain, Italy, Gibraltar, Puerto Rico, the Azores, Newfoundland, and so on. These 14-day training cruises meant fly-fly-fly most of the time, but when off-duty hours rolled around and the planes were in for checks, the crews got their share of sightseeing thrills.

These training cruises also served as good-will trips. During the tour in Spain, the squadron took approximately one ton of high-protein, multi-purpose food to be given to orphanages near Rota. California redwood trees were taken to Spanish officials as a good-will gesture.

When the squadron spent two weeks' AcDuTra in Puerto Rico shortly after Hurricane Donna had paid her visit, the Reservists airlifted food and clothing to the stricken Puerto Ricans. Large bales of clothing were carried in the planes' bomb bays; the food was lashed to the deck in accompanying R5D transport planes on the mission.

READY TO ROAR—Crewman readies *Neptune* for flight. In first three months VP-872 flew more than 10,000 pilot and aircrewman hours.

Latest reports from VP-872 indicate that squadron members have settled down into their new full-time assignments. Quite a few Reservists – 52 at last count – have enrolled in after-hours classes at NAS Alameda. Subjects include accounting, Japanese, general science and typing. Most interest has been shown in electronics courses.

In addition to the O & R courses offered at the air station, 25 officers and 71 enlisted men are taking correspondence courses offered by the Navy's Correspondence Course Center at Scotia, N. Y.

The result of this extra interest is already in evidence – 23 men have been recommended for advancement since their recall.

And, while most of the Reservists are undoubtedly looking forward to the day when they will become Weekend Warriors again, more than 40 have applied for transfer to the Regular Navy.

The Regulars working with the activated Reserve squadron sum it all up nicely: "VP-872 is a squadron that knows what it has to do and is doing a good job of getting it done." That about sums it up.

HERE WE GO—Flight crew of P2V *Neptune* patrol plane gets the word on the path they will fly while out on the day's barrier patrol.

BIG JOB—P2V *Neptunes* mapped 30,000 miles of Alaska in 1948.

HEAD-ON view shows combination of jet and conventional engines.

Sweet Sixteen an

NEPTUNES make a routine patrol over Pacific. *Below:* Engine gets a check-out between flying missions.

OTHER AIRCRAFT may come and go, but the Navy's versatile P2V *Neptune* patrol plane remains on the scene after 16 years of service.

During its nearly two decades with the Navy, the *Neptune* has grown from a twin-engine, 50,000-pound patrol plane to an 80,000-pound antisubmarine specialist—with two reciprocal engines and two jet engines and few equals in its field.

The P2V was introduced into the Navy's air arm shortly after its initial flight in May 1945. The land-based patrol plane was the successor to the famed "Black Cat" flying boats of World War Two.

The latest model of the *Neptune,* known as the P2V-7, performs many missions in the U. S. Pacific Fleet. Primarily thought of as an antisubmarine warfare (ASW) aircraft, the P2V is easily adapted to minelaying missions, long-range patrol and reconnaissance flights, escort duty with convoys and search and rescue work.

Operating in the Pacific Fleet's patrol squadrons, the *Neptune* has been flown from nearly every Pacific island airstrip north of the equator and from many in the southern hemisphere. Ski-equipped P2V aircraft, employed in the Antarctic, are almost as common as penguins to the Navymen participating in Operation Deep Freeze.

The first of the long-lived *Neptune* series was the P2V-1. This model was equipped with two 2300-horsepower engines, and was capable of attaining speeds of just over 300 miles per hour. The P2V-1 was able to take off with a maximum weight of 61,000 pounds, and had a range of 4100 miles.

In a 1946 demonstration of its abilities, a P2V-1 established a non-stop and non-refueled world record flight that held for some 15 years. The *Truculent Turtle,* with 52,392 pounds of fuel and a live kangaroo aboard, set off from Perth, Australia. It landed 55 hours, 17 minutes and 11,235.6 miles later at Columbus, Ohio.

To keep pace with the times, this *Neptune* was improved and her capabilities increased. The P2V-2 followed the P2V-1 and proved that the efficient patrol plane was not just a passing fancy.

In 1948 the Navy received the first of the P2V-3 series. The horsepower of each engine was raised to 3200, and the maximum speed was advanced to over 320 miles per hour. The weight capacity was also increased at this time, and the P2V-3 was able to become airborne with a total weight of over 65,000 pounds.

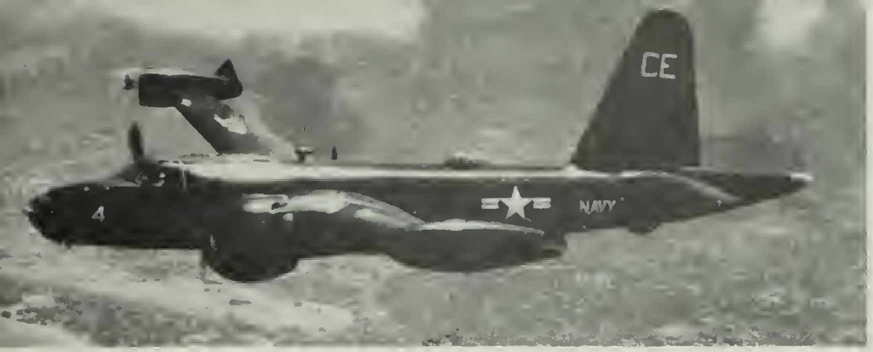
In 1954, a *Neptune* patrol plane inadvertently set another record that called attention to the plane's ruggedness and reliability. On a flight between Hawaii and Alameda, Calif., a P2V lost one of its two engines at the mid-point of the flight. The sturdy plane flew on toward Alameda, 1200 miles away, using only the surviving engine.

Shortly after the plane passed

Last P2V Joins Fleet

The last of 838 P2Vs, the Navy's *Neptune* antisubmarine warfare plane, was flown out of Burbank, Calif., to join the Fleet. That plane marked the end of a continuous production of P2Vs since 1945.

The P2V will be succeeded by the P3V-1 *Orion* which is fitted with the latest word in detection gear and is capable of speeds of more than 400 miles per hour.



PROFILE—Long tail section of *Neptune* holds variety of detection gear.

EARLY STYLE *Neptunes* fly in formation and *(below)* patrol the coast.

Still Going Strong

over the California coast, the remaining engine began to run rough under the heavy strain. When the pilot safely landed the plane at Half Moon Bay, 25 miles south of San Francisco, he found he had set a record for the longest single-engine flight by a multi-engine aircraft.

In 1955, two jet engines were added to the P2V-5 *Neptunes* that patrolled the more than 80 million square miles of ocean under U. S. Pacific Fleet control. These J-34 jets were mounted under the wing and outboard of the conventional reciprocal engines for heavy-weight takeoffs and single-engine emergencies. They also gave the hardworking antisubmarine and reconnaissance planes increased tactical and operational capabilities.

In the present day Pacific Fleet, the *Neptune* continues to carry out its varied assignments. Patrol squadrons operating with the U. S. Seventh Fleet in the western Pacific use the P2V for long-range patrol and reconnaissance missions over the international waters that separate the western and communist nations of Asia. These same squadrons participate in search and rescue operations throughout the Pacific whenever a ship or plane is reported in distress.

Carrying the latest in complex electronic search and detection equipment, the P2V is an enemy of the submarine. Among the sensitive electronic devices packed into the fuselage of the *Neptune* are: Equipment to receive radio transmissions from the sonobuoys dropped from the aircraft to detect underwater sounds and relay them back to the plane; and the Magnetic Anomaly Detector (MAD) that pinpoints a submarine in the area by its distortion of the earth's magnetic field.

The *Neptune's* skills are not limited to the detection of submarines. Once its prey is located, the P2V can move in on it with depth charges, antisubmarine rockets or acoustic homing torpedoes.

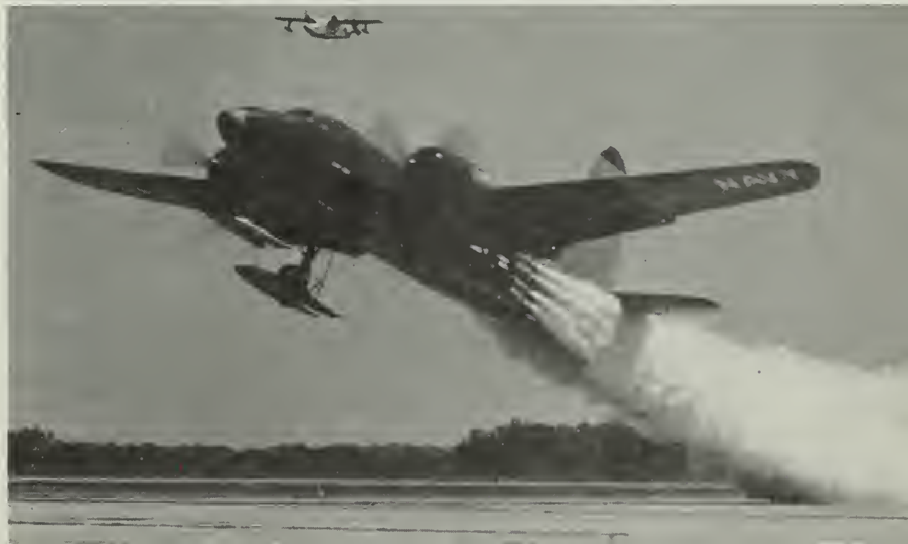
Impressed by the excellent safety and operational record that the P2V has created while serving with the U. S. Navy, seven other nations now include the *Neptune* in their air arms. They are Australia, Japan, France, Canada, Brazil, Argentina and The Netherlands.

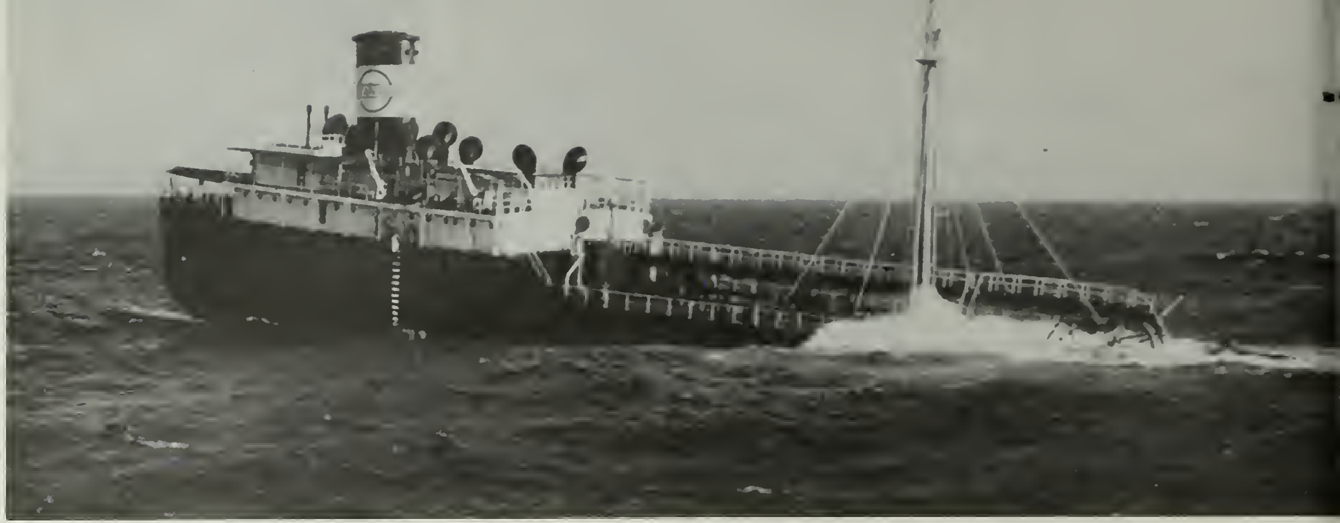
In the jet age of the 1960s, the P2V *Neptune* can be regarded as a plodder and a plugger. It lacks the speed, glamor and swept-back wing appearance of the modern day jet-powered aircraft. However, its function is no less important than that of the swiftest and most radically designed jet.

To supplement and ultimately succeed the P2V the Navy has contracted for delivery of the P3V *Orion*. Until the Navy is equipped with this modern turboprop patrol plane, the P2V will remain one of the nation's most important aircraft.

— Chuck Brown, JO1, USN.

COOL VERSION—*Neptune* equipped for Antarctic takes off with JATO.





STERN VIEW—*USS Cook* (APD 130) *(below)* went to rescue of Panamanian ship SS *Stanvac Sumatra.*

Seventh Flee

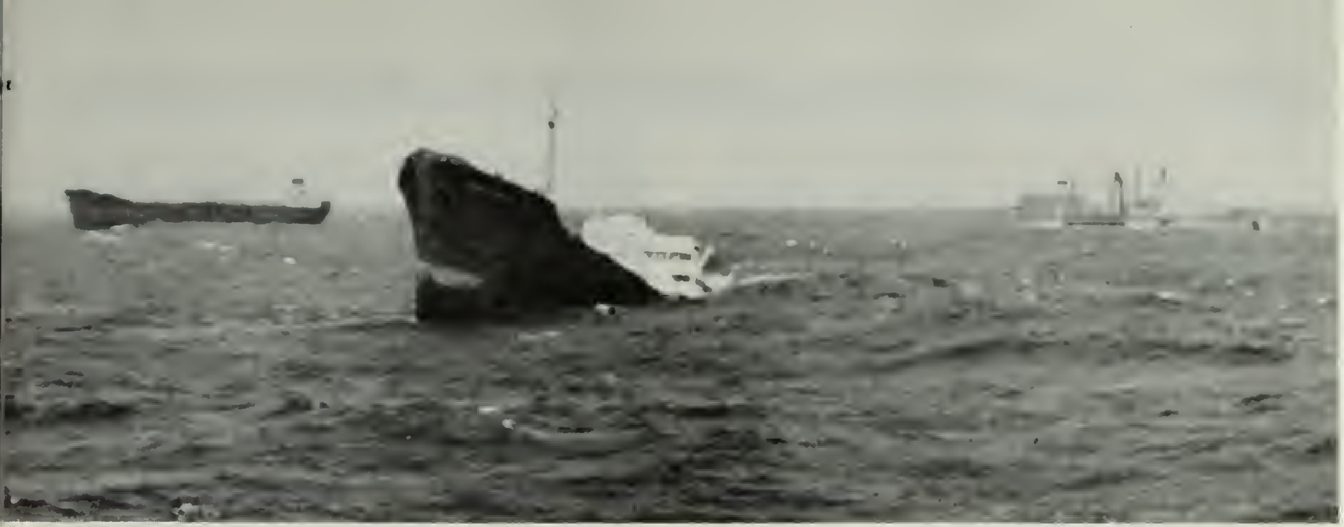
Seventh fleet rescue ships were called into action twice in little more than a week after two commercial ships ran into serious trouble in the South China Sea.

The first of the two rescue missions got underway early this year. USS *Cook* (APD 130), a unit of Amphibious Squadron 1, received an SOS from the Panamanian tanker SS *Stanvac Sumatra,* which had broken in two 202 miles southeast of Saigon, Vietnam.

Cook reached the disaster area and sighted two sections of the 10,202-ton tanker about 15 miles apart. Also on the scene were the merchant ships MV *Captain T. Basse,* SS *Tidesurge,* and SS *Eagle Traveller.*

Basse rescued 34 survivors from the forward half of *Sumatra,* and *Tidesurge* lifted one man from the sea. *Cook* took charge of rescuing the 25 survivors on the after section of the ship. Two rubber boats manned by members of Underwater Demolition Team 12 were

BOARDING PARTY—Navy frogmen help survivors board *USS Cook. Rt: USS Stoddard* aided Greek freighter.



BOWING OUT—Ships stand by section of *Sumatra*. *Below:* Crewman of *USS Surfbird* readies heaving line.

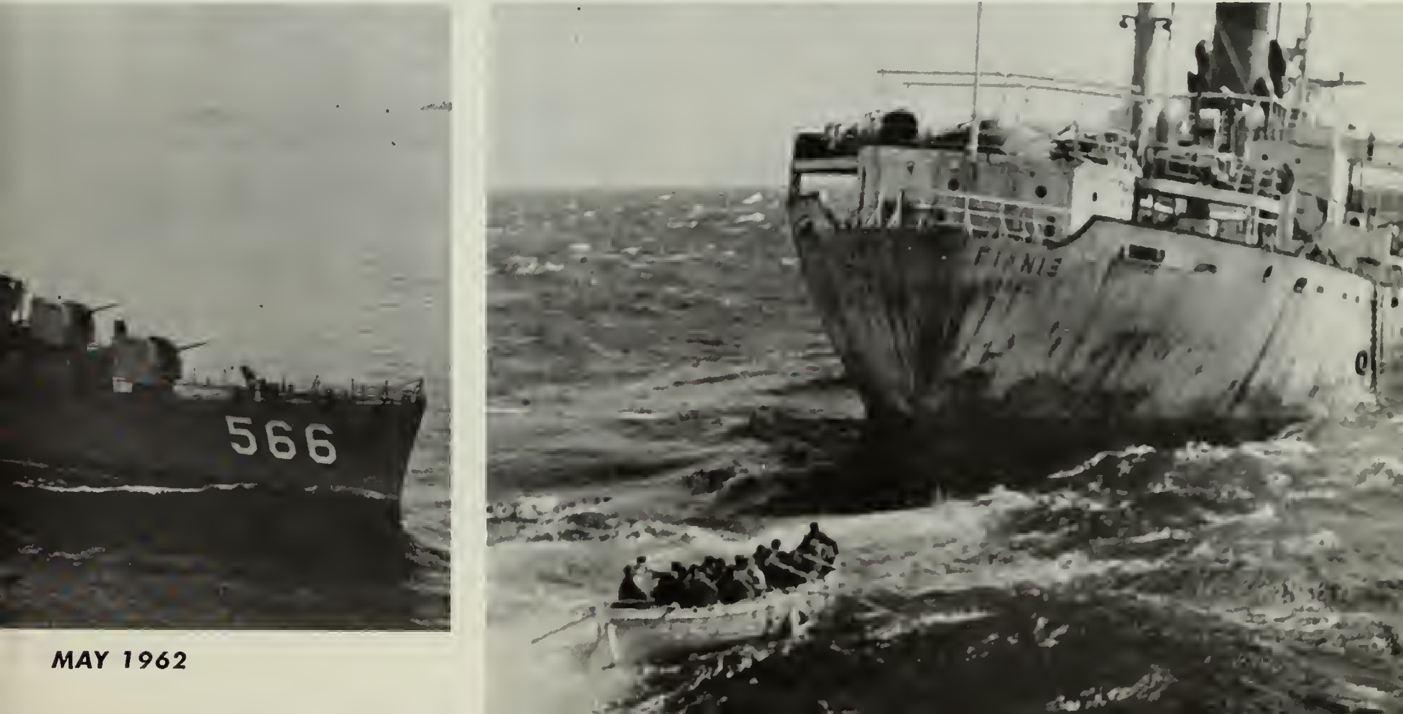
to the Rescue

shuttled between *Cook* and *Sumatra*. The operation took about 45 minutes from the time the first boat was put in the water until the last survivor was taken on board *Cook* by cargo net.

After an unsuccessful search for two missing crewmen, *Cook* took her 25 survivors to Manila. Final tally: Of 62 persons who had been on board the stricken *Sumatra*, 60 were saved.

Just about one week later, the 10,800-ton Greek freighter *Yanix*, steaming in the South China Sea northwest of Luzon, P. I., sprung leaks in two of her holds and began to sink. A call for help was picked up by the Seventh Fleet's USS *Surfbird* (ADG 383) and USS *Stoddard* (DD 566). The two ships arrived at the scene a few hours later. By late afternoon the 29 persons on board *Yanix* had been taken off, and the two rescue ships took the survivors to Manila. The freighter sank a short time later that evening.

TIME OF NEED — Crew members of *SS Yanix* head for safety as U. S. Navy ships answer their call for help.



SERVICESCOPE

Brief news items about other branches of the armed services.

AN EMERGENCY MESSAGE Automatic Transmission System, (EMATS - AF) which can automatically flash top-priority orders from USAF Headquarters to all major air commands around the world has been announced by the Air Force.

With the new service, the Air Force Chief of Staff will be able to seize existing world-wide telegraph circuits and send messages to Air Force commanders merely by pressing a button.

Any one of a group of standard emergency messages can be selected and automatically transmitted to key Air Force commanders and important Air Force headquarters. In addition to storing completely preprogrammed emergency messages for automatic transmission, the EMATS-AF service also provides for sending messages containing semi-variable and fully variable information. The system can also be used to send and receive other top-priority communications. Built-in safeguards prohibit accidental transmission of messages.

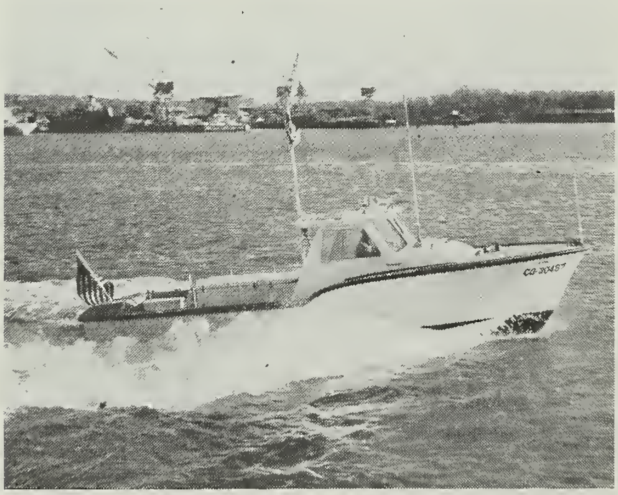
★ ★ ★

A "SKYHOOK" air-ground pickup system for retrieving men or cargo by specially equipped aircraft is being developed for the Army.

The system makes possible long range personnel rescues or emergency cargo pickups on land or sea, day or night, and even from wooded areas and rugged terrain.

A wide fork constructed of lightweight tubing is attached to the nose of the aircraft. Arriving at the scene, the plane drops a package containing a balloon, a gas cylinder to inflate it, 500 feet of nylon line, and a harness for the man or cargo. For water pickups, a floating drop kit would be used. For night pickups, flashing lights are attached to the line.

To make a pickup, the man awaiting rescue puts on the harness, attaches the line to the balloon which carries it aloft and sits down facing the direction of the rescue plane's approach. The aircraft flies straight and level into the line which locks to the nose-mounted fork as the balloon breaks away. As the line streams out along the fuselage, the crew pulls it into the plane by use of a special hook, attaches it to a winch, and the man or cargo is then reeled up and into the plane.



ON TRIAL—Coast Guard's new 30-foot MK-III plastic utility boat undergoes tests off Cape May, N. J.

MOBILE missile loader carries three U. S. Army *Hawk* missiles at speeds up to 20 miles per hour.

Although the airplane travels at speeds of 125 knots or more during the pickup, the man moves very slowly initially, gradually and smoothly accelerating until he reaches the speed of the aircraft. Total elapsed time from the point of contact to the time the man is winched into the airplane is less than 10 minutes.

Since the first 50 or 60 feet of the ascent is almost vertical, pickups can be easily made from small clearings in wooded areas. The drop package is easily handled by one man on the ground and the equipment can be readily moved and concealed for future use.

★ ★ ★

THE AIR FORCE will soon unveil an "alarm clock" designed to detect nuclear attack. Should an attack hit any of 100 key U. S. military and industrial sites or population centers, the alarm system, now being installed in each of those areas, will flash instant notification to our top civilian and military officials at 10 different locations.

Operational control of the system will rest with NORAD (North American Air Defense Command). In addition to NORAD's combat operations center at Colorado Springs, Colo., the nine other locations which will receive instant information from the system are: The White House; the Pentagon; Strategic Air Command headquarters at Offutt AFB, Nebr.; other Air Force bases, and two sites that are classified.

The system is expected to be in complete operation by July of this year. The alarm would be set off by thermal devices which would function even if a nuclear bomb struck the area where they are located. Detectors are arranged three or more to a target, and any two would sound the alarm, even if the third suffered a direct hit.

NORAD's super alarm clock will provide needed information until its much more sophisticated Nuclear Detonation Detection and Reporting System (NUDETS) becomes operational.

NUDETS will report the height and yield of a nuclear blast as well as its time and location.

THE FIRST STEP TO TURN a dream into reality has been taken by the U. S. Army Transportation Research Command at Fort Eustis, Va. The dream is an airplane which will take off and land vertically, yet travel forward at high speeds.

The Army Research Command has awarded a contract approaching seven million dollars to cover the first phase of a two-part program. The first phase calls for a research program, during which a lift fan propulsion system will be tested in two research aircraft.

The lift fan system has three major components: A jet engine, a gas diverter valve and a tip turbine-driven fan.

In order to achieve vertical take-off, the jet engine gases are directed through the diverter valve to tip turbines driving lift fans mounted on the wing structure. This method produces about three times the thrust supplied by the jet engine operating alone.

Once the aircraft is aloft, it is accelerated from its hovering position to forward flight by use of vanes which direct the fan air-flow partially rearward. When enough horizontal velocity is obtained for the wings to support the aircraft, the diverter valve closes and the exhaust flows through the engine as it does in normal forward flights at speeds of more than 450 knots.

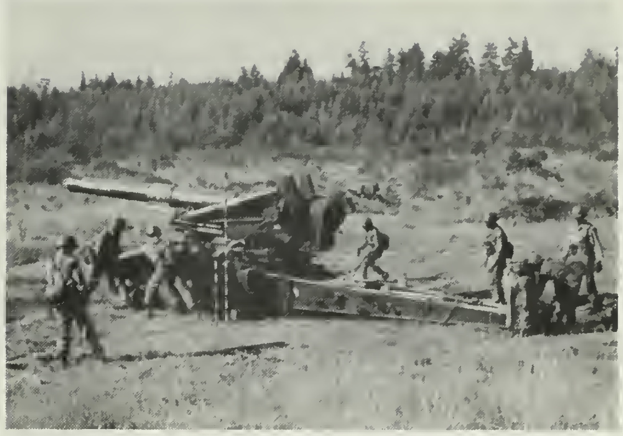
The plane will be landed by reversing this procedure.

The research aircraft will be powered by two jet engines, each of which will develop more than 2500 pounds of thrust. Its wing span will be about 30 feet and over-all length will be about 45 feet.

Louvered closures will cover the wing-mounted fans in order to provide a smooth aerodynamic surface while the aircraft is in forward flight.

For greater safety, the exhaust from each jet engine will be divided so the lift fans can still be driven even if one engine is inoperative.

PARATROOPERS of the U. S. Army's 101st Airborne Division prepare to board a plane for drop zone.



SOLDIERS of U. S. Army's 4th Infantry Division set up an 8-inch howitzer at Fort Lewis, Wash.

THE AIR FORCE is developing a system to maintain surveillance of orbiting man-made or natural objects in the area beyond the earth's nominal, low-altitude orbital areas and the moon.

The Space Track system, developed shortly after the orbiting of the first man-made satellite in October 1957, was the forerunner of the United States satellite surveillance system charged with the detection, tracking and cataloging of orbiting objects for defense purposes. It will be necessary to track any natural "moonlets" because, until an inventory of everything in orbit is established, it is not possible to tell if something has been added.

In addition to the nine large planets circling the sun, the presence of planetoids has long been known. The earth is known to have only one moon-satellite and no known moonlets. However, no astronomer has taken the time to catalog every faint object in space.

It will be relatively easy to determine whether the objects are natural or man-made. Natural moonlets are heavy chunks of rock, whereas man-made satellites are normally hollow, instrument-carrying objects. This difference in density causes differing orbital characteristics to show up under prolonged observation. In either case, the position and orbit of any satellite would be logged in so that if an unannounced satellite, not sent by the United States, were discovered, it would be possible to say: "This is a natural moonlet," or "This is a foreign satellite."

★ ★ ★

THE ARMY has been testing a mobile weather radar device capable of surveying a 600,000 square mile area for oncoming storms and predicting, with accuracy measured in minutes, when a storm will strike any given point.

The set, which is housed in a standard 6-foot Army trailer, dissects a storm to show its shape, indicate the density of precipitation at different points, indicate its cross-sectional structure and track the movement of the storm system. These features are shown on an array of TV-like display tubes.

The set is an improvement on the first weather radar developed by the U. S. Army Signal Research and Development Lab at Fort Monmouth, N. J., in 1946.

ROTATION ROUNDUP

A NUMBER OF CHANGES have been made in Seavey-Shorvey since the sea-to-shore and shore-to-sea enlisted rotation program was officially adopted approximately four years ago. These changes, in a system that was complicated in the first place, have, to a large extent, tended to confuse the Man in the Fleet. (As evidenced by the questions ALL HANDS receives each month, the question asked most frequently: Why haven't I been transferred to shore duty? Everyone but me, it seems, is being transferred ashore.)

On the following pages, ALL HANDS describes the workings of Seavey-Shorvey.

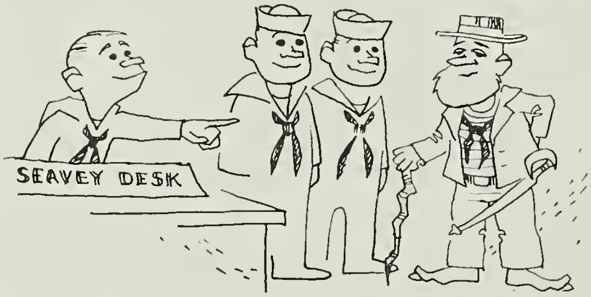
Why Rotate?

The Navy's military and diplomatic commitments throughout the world require the operation and maintenance of more than 3000 ships, stations, squadrons, missions and other commands. Approximately half a million enlisted men and women are needed to keep the Navy in operation.

The number, type and size of all Navy activities is determined by the Chief of Naval Operations. CNO also determines how many enlisted men and women are required for the operation of each activity.

The Chief of Naval Personnel is responsible for seeing that each naval activity has the right man in the right job at the right time. This is a complicated task. There are approximately 130,000 shore billets, 325,000 sea duty billets and 24,000 overseas billets.

Half a million enlisted personnel cannot be constantly shuffled from billet to billet, so stability must enter into the picture and temper the assignment system. Stability — a key word in assignments for an effective Navy — means having you where you are needed when you are needed, for a reasonable length of time, so administrative functions, evolutions, and operations proceed with maximum continuity. When it's possible, every attempt is made to satisfy your duty and job request. The Navy knows that if you like your job, chances are you will do it well.



Your rotation from sea to shore and back again is essential. A well-rounded Navyman should be able to perform a variety of jobs ashore and afloat. For example, the operation of Fleet support activities ashore requires men who have had experience at sea. Instruction, recruiting, administration, maintenance and operational billets are other shore jobs that need men with sea experience.

The length of your tour of shore or sea duty depends on the ratio of shore billets to sea billets for your rating. In ratings that have more shore billets than sea billets, the normal tour of shore duty is longer than the normal sea tour. If your rating has more sea billets than shore, your tour at sea is longer. From time to time it becomes necessary to change the lengths of a rating's sea and shore tours to improve stability. This change is normally the result of allowance changes and a continuing shortage of certain ratings in certain types of duty.

To keep the half million enlisted sea and shore billets filled with the right men, and at the same time try to assign each man to the duty of his choosing, the Navy has adopted Seavey-Shorvey, a systematic program of enlisted distribution which lets the Chief of Naval Personnel know at all times exactly where you are, how long you'll be there, and to which general type of duty you will be rotated next.

The Shorvey, or shore duty survey, is the program under which you are ordered to sea duty after you've completed a tour ashore. The Seavey — sea duty survey — governs your rotation from sea to shore.

The Shorvey

If you're serving on shore duty, the date you will be assigned to sea depends on your rating and its prescribed period of shore duty. The Chief of Naval Personnel maintains a listing of all shore duty personnel and knows exactly when you, as determined by your rating, will be ready for transfer back to sea. The Shorvey process works like this:

Approximately *one year* before you complete your tour ashore the Personnel Accounting Machine Installation (PAMI) responsible for your command prepares, and mails to your commanding officer, a rotation data card. Your CO will see that you are interviewed by a qualified officer or senior petty officer. You fill out an interview form, indicating your choice of sea duty. The information is transposed to your rotation data card, which is then returned to the PAMI.

Next, PAMI prepares a Shorvey data card from the information on your rotation data card and your individual status card. The Shorvey data card is transmitted to the Chief of Naval Personnel for storage on a "master" magnetic recording tape for future use when a decision must be made on your assignment.

Normally, *four months* before your shore tour is completed, a BuPers distribution control officer "makes you available" to a Fleet Distribution Office or to a BuPers detailer, with instructions to transfer you during the month your normal tour of shore duty is completed.

EAVEY AND SHORVEY

When BuPers has decided what broad area you will be assigned to (Lant, Pac, or Bureau-controlled), it transmits to your commanding officer a copy of the Shorvey 1A card which confirms estimated transfer month, the number of days you may spend on leave in the transfer process and the sea duty distributional office which is handling your assignment. This "first" notification normally arrives at your command three to four months before the transfer date.

Meanwhile, the EPDO or Bureau detailer, who also has received the information on your 1A card, plus all your rotation data which has been stored in the Bureau on the magnetic master tapes, is assigning you a new duty station within his jurisdiction. When your new duty station has been determined, an assignment card or letter is prepared and sent to your CO. This directs him to transfer you to a specific sea activity for a tour of sea duty.

At the same time the assignment card or letter is mailed to your shore duty station, a copy is also forwarded to your prospective sea duty command. In this way, your new CO will have some advance notice and will be able to determine which job you should take over when you arrive. You usually receive word of your ultimate assignment at least a month before transfer time – or in plenty of time to make preparations for the move. Your CO will issue you a standard transfer order, directing that you be transferred during the specified month, taking your authorized leave on the way. In general, a Shorvey transfer is as simple as that.

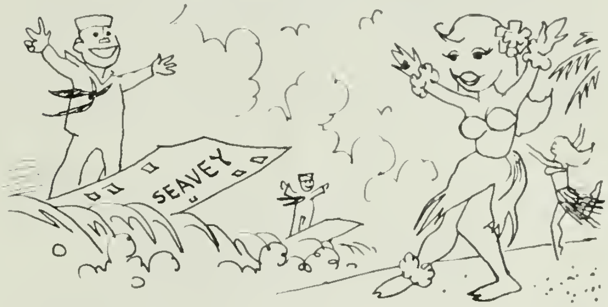
Some rates, ratings and categories of personnel are under the direct rotational control of the Chief of Naval Personnel or CO, EPDOCONUS. They are not, therefore, included in the Shorvey procedure. These are: All personnel of the CT, MA, MU and TD ratings; AGCs; all enlisted women; aviation pilots; TAR personnel; and men designated limited duty category L-5 and L-6.

The Seavey

The Seavey works closely with Shorvey. Together they form a distribution system which permits planned rotation. This is essential if you are to receive your fair share of both sea and shore duty.

Under the Seavey, all sea duty personnel are divided into three segments. Once each year, all ratings in each of the segments are surveyed, and a sea duty commencement cutoff date is established for each rating to determine which men should be rotated to shore duty (see the section entitled "How the Segments Work," on page 27). In general, the procedure is like this:

- Once each year a BuPers Notice announces the sea duty commencement date cutoffs for ratings in the various segments.
- PAMI selects you for Seavey if you have been at sea long enough to meet the cutoff date requirement. PAMI issues rotation data cards to your ship.
- Your ship assists you in filling out your rotation data card. You indicate your choice of U. S. shore duty or, possibly overseas shore duty, and note any other information that may assist the distributor when he selects your next duty station. Your ship returns the completed card to PAMI.
- PAMI combines the information contained on your rotation data card with other information it has on file, and transposes this into coded punch cards which are transmitted to the Bureau.

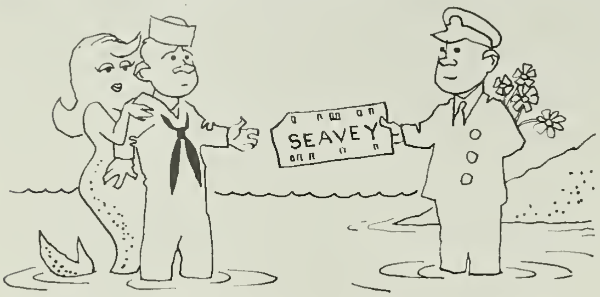


- BuPers prepares a listing of all personnel of each rating, in order of active duty base dates, for use of distribution officers in determining priority of assignments to shore duty.
- As men are ordered to sea duty under the Shorvey system previously described, a number of shore billets become vacant. To fill these vacancies the distribution control officer for your segment selects the senior man of the required rating and pay grade on Seavey, who has indicated a preference for the general area where the vacancy will occur.
- If you're the man selected, a 1A card is mailed to your CO indicating the month you will be transferred, the number of days' leave you are authorized to take between duty stations, and the naval district within which you are to be assigned.
- At the same time the 1A card is mailed to your command, another 1A card, plus all your rotation data, including preferences and any additional information, is forwarded to the EPDO controlling the general area to which you are going.
- The EPDO assigns you to a specific duty station under its jurisdiction. (In some cases, the Chief of Naval Personnel will retain authority to assign you himself to a Bureau-controlled billet.)
- The EPDO, upon deciding your ultimate assignment, forwards assignment cards to your CO and the command to which you are being ordered. This allows for planning at both ends.
- Your ship prepares a standard transfer order and transfers you during the month specified by the Chief of Naval Personnel on the 1A card.

Basically, just when you will be transferred by Seavey is determined by your sea duty commencement date (how long you've been at sea) and your active duty base date (how long you've been on active duty in the Navy).

Your sea duty commencement date is the main consideration in the early stages of the Seavey process. If the cutoff date for your rating doesn't disqualify you, your name will be added to Seavey for processing. The cutoff date decides whether you will (or will not) be eligible for shore duty during a particular Seavey year.

Your active duty base date is important in later stages of the procedure. When actual assignments are made, men in your rating who have been on active duty longer than you will normally be transferred first.



Shore Duty Completion Date: How It Affects Rotation

Of all the changes in Seavey-Shorvey the past few years, the one that has generally been the least understood is the new (effective last July) shore tour completion date process (*Enlisted Transfer Manual,* Art 7-41). It's important that you understand the process when first reporting to shore duty.

Under the Shorvey, your tour of shore duty commences the day you report to a shore command after a tour of sea duty. (Periods of training in naval schools are not counted as part of a shore tour unless you were already serving on shore duty.)

Once your shore duty commencement date is established, the maximum tour for your rate or rating is determined and a normal tour of shore duty is computed.

If your *expiration of active obligated service* (EAOS) falls before the maximum shore tour completion date, and you do not agree to extend your enlistment, your tour of shore duty will be recorded as ending on the same date your enlistment expires. If you do agree to extend, the extension must be for a sufficient period to complete the maximum normal shore tour, plus at least 12 months, unless (this is rare) your new (extended) EAOS and your shore tour completion date coincide.

New Procedure Permits Planning

There's a good reason for this on-the-spot decision you must make when first reporting to shore duty. In the name of stability, and for effective planning, the Navy must know what your intentions are when you first report. Thus, the Navy knows exactly how long you can be counted on to fill a certain shore billet, and it can further predict when a relief is going to be needed for you.

This policy, of fixing a rotation tour date the day you report, will pay dividends in the years to come. It will make possible an extremely accurate prediction (at least a year ahead) of exactly how many men of a particular rating will be needed to fill shore requirements. By knowing the exact number of requirements ashore, a truly valid sea duty cutoff date can be established for Seavey, providing only the number

Take Time Out to Read and Understand These Definitions

- *Sea Duty* — Duty performed in: Fleet units, ships, staffs or squadrons; certain ships and units which operate under the control of district commandants, river commands or the Chief of Naval Air Training, and which have individually been designated as sea duty by the Chief of Naval Personnel; all naval activities based ashore outside the continental U. S.; the Fleet Marine Force; Mobile Construction Battalions; and other units and activities which have been designated as sea duty by either the Chief of Naval Personnel, CINCPACFLT, or CINCLANTFLT.
- *Overseas Service* — Duty performed ashore at activities outside the continental U. S. (Alaska and Hawaii are considered to be outside CONUS; are therefore overseas service spots.)
- *Shore Duty* — Duty in staffs, units, activities and harbor craft in the continental U. S., except Fleet units. Also duty in those Fleet units, staffs, and activities based in the continental U. S. which are specifically designated as Fleet shore duty by the Fleet commander.
- *Normal Tour of Shore Duty* — Varies from rate to rate (see shore tour list, p. 31).
- *For Duty* (pertaining to shore assignments) — If you are ordered to fill a vacancy ashore outside the Seavey procedure you are in a "For Duty" category. Normally, you are ordered For Duty only when there is an urgent need to fill a vacancy ashore and no one who possesses the qualification is available on the Seavey. Rated men assigned ashore For Duty may ordinarily expect to remain ashore for the normal tour of their rating. But, if you do receive a For Duty assignment, you do not have the same permanence of tour length as men assigned ashore for a normal tour. Shore assignments granted for humanitarian purposes are also For Duty.
- *Special Tour* — This may apply to "For Duty" tours, and also applies to SN, SA, FN, FA, CN and CP personnel who have served at sea less than 12 months. Normally this number is small. Men in these ratings are assigned ashore for 12 months after boot camp.
- *RTD* — Rotation Tour Date. The date you are due for rotation after you've completed the prescribed tour of duty.
- *EAOS* — Expiration of Active Obligated Service. The date your active duty enlistment (including any extensions) expires.
- *PAMI* — Personnel Accounting Machine Installation.
- *EPDO* — Enlisted Personnel Distribution Office. (There's more on PAMI and EPDO on p. 29.)

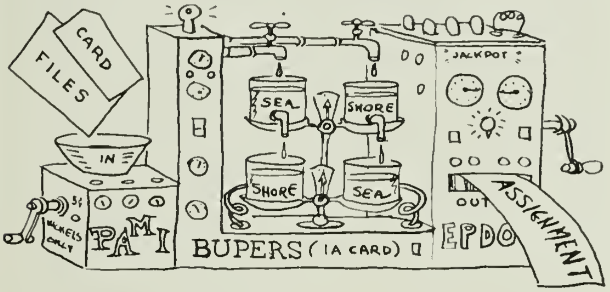
of men required for the coming year. You should then be able to plan on rotating ashore during that year if you are on the Seavey.

Before this new system was adopted there were many variables affecting tour completion dates, and requirements could never be pinpointed. The result was too many men in the Seavey – or, "overplanning." If you have been awaiting Seavey orders for two years or more, you can blame it on overplanning as a result of adjusted rotation tour dates. The present system for establishing dates should eliminate excesses and produce a far smoother system in years to come.

How the Program Works

If your EAOS is less than the established normal shore tour for your rating, you must agree to extend when you first report ashore. Otherwise, you'll either (1) be discharged at your shore station when your enlistment expires, or (2) if you later decide to extend or reenlist, you will be ordered to sea immediately, without completing your rating's normal tour of shore duty.

If you intend to make the Navy a career, your chances of getting the sea duty of your choice are greater when you agree to extend and complete the normal tour. If you wait until your enlistment expires, it's usually too late then to assign you to a preferred sea billet since, by waiting until the last minute, you have not given the distributors a chance to plan. Thus, you become one of the "immediately availables" used to plug the gaps and fill urgent requirements.



Other set procedures in the shore completion date process are determined when you first report ashore.

If your EAOS falls from one to six months after a normal shore tour would be completed, the shore tour would be extended so it coincides with your EAOS. If your EAOS happens from 7 to 11 months after a normal shore tour would be completed, you will be given the opportunity to extend your enlistment to provide at least 12 months of obligated service at the completion of a normal tour. If you do not extend to provide at least 12 months' obligated service in this latter case, your rotation tour date will be moved back and you'll be "short-toured" so that 12 months will remain on your enlistment for rotation to sea duty.

Choices You Can Make

Here's a closer look at each election:

- Your enlistment is to expire before you could complete a normal shore tour. In this case, you must make up your mind, when first reporting ashore, whether or not you wish to extend to complete the full tour. If you elect not to extend, your shore tour completion date will be the same as your EAOS. Take this case, for example, in which your normal tour ashore is three years:

You report for shore duty in May 62
Your enlistment expires in September 63
A normal shore tour would be until May 65
You elect not to extend
Shore tour completion date, as recorded, is September 63.

If, in this case, you decide to reenlist or extend after your shore tour completion date has been recorded, you would still not stay ashore later than September 63. You would be made available to the Chief of Naval Personnel for rotation to sea.

- You decide to extend for a full tour when first reporting ashore. Under the foregoing circumstances, it would look like this:

You report for shore duty in May 62
Your enlistment expires in September 63
A normal tour ashore would be until May 65
You agree to extend for three years
New EAOS is September 66
Your shore tour completion date, as recorded, is May 65—a normal tour.

- Your enlistment is to expire less than six months after a normal tour ashore would be completed. You do not agree to extend, so your shore tour is automatically *increased* to coincide with your EAOS. This avoids returning you, when you're a short-timer, to sea duty for a few months. But, again, if you wait until the last minute to reenlist or extend, you reduce your chances of getting the sea duty of your choice.

You report ashore in May 62
Your enlistment expires in September 65
Normal tour would be until May 65
Your tour ashore would be until September 65 (same as EAOS).

Had you extended when first reporting, you would rotate on schedule (May 65) and by then would have had sufficient time to indicate the sea duty of your choice – increasing your chances of getting it.

- Your enlistment is to expire from seven to 11 months after a normal tour would be completed. You

Here's How You're Selected for a Specific Billet

While filling out your Seavey rotation data card, remember the following points:

- Keep your areas of preference for shore duty as broad as possible.
- Indicate your special qualifications and training.

If you follow these tips, the distribution officer will have a greater latitude in assigning you — thereby increasing your chances for rapid rotation — and you will be assigned to a billet which requires your special skills. Here's why:

Once you become eligible for a Seavey transfer and your rotation data card is processed, your name is placed on a list with all other men of your rate and rating who are eligible for the same annual Seavey. For example, if you're a BM1, your name is placed on a list with other BM1s eligible for Seavey transfer during the same segment year.

Your position on the list is determined by your active duty base date — the BM1 who has been in the Navy the longest will be at the top of the list; the BM1 with the least total active service will be at the bottom.

Meanwhile, a number of vacancies for BM1s are occurring ashore. At NAS Jacksonville, Fla., for example, a BM1 on shore duty under the distributional control of EPDOCONUS is scheduled to rotate to sea under the Shorvey. NAS Jax is in the Sixth Naval District, so a shore requirement is generated for 6ND.

Which BM1 on the Seavey list will be picked to fill the Jax billet?

First, the distribution control officer makes sure there are no BM1s still remaining on a previous year's Seavey. If there are, one of these men will get the Jax assignment. If not, the control officer takes the current BM1 list and, starting at the top, reviews each data file.

If the BM1 at the top of the list had indicated a preference for duty in 6ND, he would receive the assignment. (On the rotation data card this preference is in the form of a three-letter code starting with the letter G, or 6ND. The *Enlisted Transfer Manual*, Chapter 25, contains a complete listing of area codes.)

Or, the top BM1 could have indicated ZOO (anywhere east of the Mississippi) or OOO (anywhere U. S.), which would also justify his being selected for 6ND. If he had not indicated G--, ZOO or OOO, the next BM1 is reviewed, and so on down the list until the most senior man who indicated a preference for 6ND, anywhere east of the Mississippi or anywhere U. S. is found. He is then selected for 6ND and made available to EPDOCONUS.

At EPDOCONUS the detailer for 6ND assigns the BM1 to an activity where a vacancy exists, giving special consideration to any specific location indicated on the rotation data card. It could be the Jax billet, or another billet, if there's another vacancy.

If a shore billet must be filled by a man who possesses some special qualification, the "start at the top of the list" procedure is used, but modified slightly so that only men who possess the required qualifications are considered. (Your special qualifications are indicated by your NEC and the information is noted in blocks 15 and 16 of your rotation data card. You should also use block 15 to list any personal information, not included elsewhere, which you wish the distributor to consider. An example of this may be the following notation, "Dependents and household effects on West Coast.")

extend your enlistment to allow for at least 12 months obligated service upon completion of tour.

You report for shore duty in May 62
Your enlistment expires in December 65
Normal shore tour is until May 65
You agree to extend for 12 months
Your new EAOS is December 66
Shore tour completion date is May 65—a normal tour.

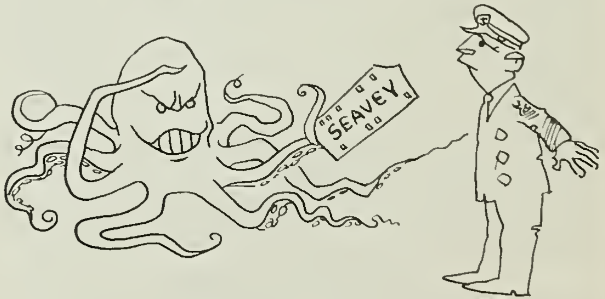
If you do not extend under these circumstances, the tour of shore duty is *reduced* so that you will be rotated back to sea 12 months before your EAOS.

You report for shore duty in May 62
Your enlistment expires in December 65
Normal shore tour is until May 65
You do not agree to extend
Shore tour completion date is December 64; less than normal tour.

You Rotate On Schedule

What it all boils down to is this: You should understand that your agreement to extend must be executed at the time you report, if you wish to complete a normal tour of shore duty but don't have sufficient obligated service.

In any case, once your shore tour completion date is figured and entered in the personnel diary it cannot be changed, except for humanitarian reasons or the needs of the service, or unless you transfer to the Fleet Reserve or Retired List, or receive a commission. The Chief of Naval Personnel must approve or authorize each and every change.



There is one other rare case which occasionally arises with men in ratings that have long shore tours. For example, let's say you report ashore already serving on an extension of your enlistment. According to existing regulations it is unlawful to extend an enlistment for any period greater than four years. In other words, you desire a full shore tour but are prevented by law from extending to get it. What can you do?

Your decision still must be made immediately upon reporting. The Chief of Naval Personnel will honor a page 13 entry which indicates your intent to reenlist upon completion of your extension in order to obtain a normal shore tour. This provision was included in the new procedure so men serving on extensions would not be forced to take a monetary loss from an early reenlistment. But, remember, this is an infrequent exception to normal cases.

How the Segments Work

The Seavey system of transferring you from sea to shore is administered on a basis of segments. You belong to one of three segments; your transfer is processed during the same time period with transfers of men of other ratings in the same segment. Once each year each rating in each of the three segments is surveyed. Men who have been at sea long enough to qualify for their rating's sea duty commencement cutoff dates are placed on the Seavey for transfer ashore. The segments consist of the following ratings:

Segment 1 — BM, QM, SM, RD, SO, TM, GM, MN, GMT, FT, MT, ET, DS, IM, OM, RM, YN, PN, SK, DK, JO, LI, DM, PC

Segment 2 — CS, SH, MM, EN, MR, BR, BT, EM, IC, DC, PM, ML, EA, CE, SF, EO, CM, BU, SW, UT, SD, TN

Segment 3 — AD, AT, AO, AB, AE, AQ, AM, PR, AG, AK, PH, PT, HM, HN, DT, DN

Also included in the segments are designated strikers, pay grade E-3, of the ratings listed. Other non-rated personnel do not come under the Seavey, and personnel of the AC, TD, MA and CT ratings, and AGCs, receive transfers through special orders written by the Chief of Naval Personnel or EPDOCONUS.

Segments Surveyed Each Year

In order to spread the administrative workload of Seavey over the full 12-month period, a yearly schedule is followed for placing each segment in effect. This is done on a continuing basis, with the same action taken on each segment each year at the same time.

Seavey tries to assign you and other men in your segment to shore duty before the following segment comes up for action. This is not always possible, owing to excesses in certain ratings on a particular Seavey. The integrity of the system is upheld, however, in that men in a particular rating will not be ordered from a current Seavey until all men of the same rating (and rate) have been ordered from previous Seaveys. The only exception to this procedure is when a requirement arises for a certain NEC or qualification. In this case, the first man on the list who has this qualification indicated in his rotation data is selected. He may be the top man on the list, halfway down, or even the last and only man able to fulfill the requirement.

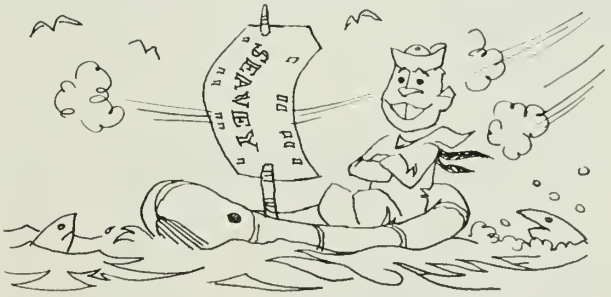
SEAVEY SEGMENT SCHEDULE

	Segment 1	Segment 2	Segment 3
PAMIs start Fleet summary	1 Jul	1 Nov	1 Mar
Fleet summary due in BuPers	1 Aug	1 Dec	1 Apr
BuPers announces sea tour commencement dates	1 Sep	1 Jan	1 May
Rotation data cards mailed to sea commands by PAMIs	30 Sep	31 Jan	31 May
Commands mail data cards back to PAMI (no later than)	15 Nov	15 Mar	15 Jul
Seavey data cards (from PAMI) due in BuPers no later than	1 Jan	1 May	1 Sep
BuPers starts issuing orders	1 Feb	1 Jun	1 Oct

Punch Cards Expedite Transfer

Seavey-Shorvey uses a punch card procedure which helps to expedite the processing of your transfer. Several types of punch cards, or personnel data cards, are presently in use. The data card series consists of four basic cards, each of which contains your name, your service number, the code numbers which identify the reporting distributor and the distributor to whom you are assigned, and the activity from which you are reported.

Before you complete a tour of sea or shore duty, your data card is sent from the PAMI to your command for processing. While filling it out you verify your qualifications for a particular choice of duty, list your duty preferences and spell out other details concerned with your transfer.

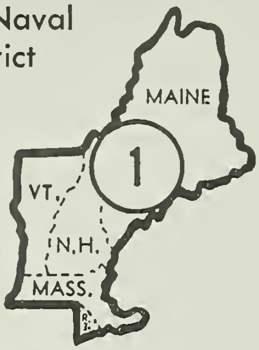


- Under the Shorvey, rotation data cards are pre-

Are You Hoping to Drop Anchor Somewhere in Continental U. S

Are you curious as to what kind of shore duty the Navy offers in your favorite city? On these and the following pages are tables showing cities where naval activities are located. Anchors indicate presence of a specified type of unit.

1st Naval District



	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Shipyard	Other
Augusta, Me.							⚓																
Bangor, Me.							⚓																
Boston, Mass.	⚓				⚓	⚓	⚓						⚓					⚓	⚓		⚓	⚓	⚓
Brunswick, Me.			⚓																				
Buzzards Bay, Mass.		⚓																					
Castine, Me.		⚓																					
Chelsea, Mass.												⚓											
Cambridge, Mass.		⚓																					
Davisville, R. I.									⚓														
East Machias, Me.															⚓								
Hanover, N. H.		⚓																					
Harpswell Neck, Me.																							⚓
Hingham, Mass.																	⚓						
Marion, Mass.											⚓												
Medford, Mass.		⚓																					
Melville, R. I.																							⚓
Nantucket, Mass.																				⚓			
Newport, R. I.					⚓	⚓	⚓				⚓	⚓			⚓	⚓	⚓		⚓				⚓
Portsmouth, N. H.						⚓	⚓					⚓										⚓	⚓
Providence, R. I.		⚓					⚓																
Quonset Point, R. I.			⚓																				⚓
Salem, Mass.							⚓																
South Weymouth, Mass.			⚓																				
Springfield, Mass.							⚓																
Winter Harbor, Me.																			⚓				
Worcester, Mass.		⚓					⚓																

*Naval Reserve Training Centers are also located in the following cities: MASSACHUSETTS: Brockton, Fall River, Lawrence, Lowell, Lynn, New Bedford, Pittsfield, Quincy. VERMONT: Burlington. NEW HAMPSHIRE: Manchester. R. I.: Pawtucket, Woonsocket. ME.: S. Portland.

pared for all shore duty personnel in accordance with the following schedule.

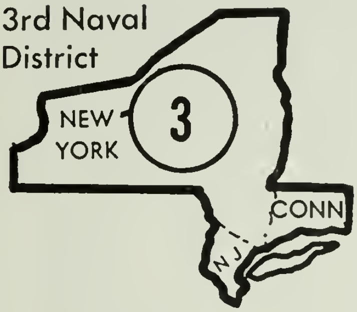
Cards Prepared By PAMI	Forwarded to Command for Completion By	For Men Whose Duty Tours Expire 11 to 13 Mos. Later
FEB	25 FEB	JAN, FEB, MAR
MAY	25 MAY	APR, MAY, JUN
AUG	25 AUG	JUL, AUG, SEP
NOV	25 NOV	OCT, NOV, DEC

- Under the Seavey, three times each year (in accordance with the Segment Schedule, p. 27) the PAMIs prepare rotation data cards for sea duty personnel whose tours commenced on or before the month established for their rates or ratings. These cards are forwarded to the COs concerned for completion. When the rotation data cards are returned to the PAMI, Seavey data cards are prepared for each man and transmitted to the Chief of Naval Personnel.

heck These Charts Showing Naval Activities in Each District

Remember that the number of billets and the ratings eligible for these billets will vary at each location. Take this into consideration when you express your preferences for shore duty, and note the suggestions given in this report.

3rd Naval District



	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Albany, N. Y.	⚓						⚓																
Bayonne, N. J.					⚓																		
Binghamton, N. Y.							⚓																
Bridgeport, Conn.							⚓																
Bronx, N. Y.							⚓																
Brooklyn, N. Y.			⚓	⚓	⚓	⚓	⚓					⚓						⚓	⚓				
Buffalo, N. Y.	⚓						⚓																
Earle, N. J.																	⚓						
Fort Monmouth, N. J.																							⚓
Groton, Conn.						⚓	⚓				⚓												
Ithaca, N. Y.		⚓					⚓																
Kings Point, N. Y.		⚓																					
Long Island, N. Y.												⚓											
New Haven, Conn.		⚓					⚓																
New London, Conn.																							⚓
New York City, N. Y.	⚓	⚓	⚓		⚓						⚓		⚓							⚓		⚓	⚓
Rochester, N. Y.		⚓					⚓																
Schenectady, N. Y.											⚓												
Scotia, N. Y.							⚓																⚓
Troy, N. Y.		⚓					⚓																
Windsor, Conn.											⚓												⚓

*Naval Reserve Training Centers are also located in the following cities: CONNECTICUT: Cromwell, Hartford, Stamford, Waterbury. NEW JERSEY: Clifton, Elizabeth, Jersey City, Port Newark, Perth Amboy. NEW YORK: Dunkirk, Elmira, Freeport, Glens Falls, Huntington, Jamestown, Liverpool, Newburgh, New Rochelle, Oswego, Poughkeepsie, Tompkinsville, Utica, Watertown, Whitestone, Yonkers, Youngstown.

**Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.

PAMIs and EPDOs

The Navy's Enlisted Personnel Distribution Offices in San Diego, Calif. (EPDOPAC), Norfolk, Va. (EPDOLANT), and Bainbridge, Md. (EPDOCONUS), handle much of the work that goes into your transfer to the right place at the right time.

The three EPDOs are serviced by PAMIs which, with help from electronic brains, give rapid personal service while processing the assignments of men under their jurisdiction.

The EPDO at Bainbridge maintains up-to-date records of all Navymen serving on general shore duty in the continental U. S. and makes individual assignments. The EPDO in San Diego is the distribution focal point of the Pacific Fleet, and the EPDO in Norfolk is the manpower assignment center for the Atlantic Fleet.

The EPDOs, and their corresponding PAMIs, are linked to a master electronic data processing system which is operated by this Bureau. Manpower information which covers the status of each Navyman is fed into the network via high-speed transmitters and punch card equipment. (Among other things, the high-speed transmittal of manpower information helps to keep pace with the constantly changing qualifications of individual enlisted specialists).

The Manpower Information Network swings into operation at individual commands, or components of commands, which submit to their PAMIs detailed personnel

information. (This is one of the main reasons your personnel office keeps a diary. It includes such information as personnel transferred or received, information which pertains to the qualifications or status changes of individuals, and assignments desired upon completion of tours.)

For an example of the scope of the Manpower Information Network's job load, consider the number of command diaries processed recently by PAMICONUS during just one month: 1489 command diaries for officers and 1609 enlisted; included in which were nearly 225,000 changes to personnel records.

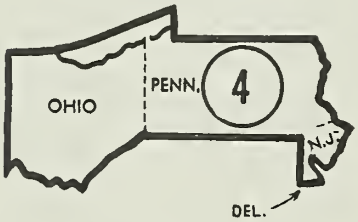
Machines Speed Process

PAMI transforms diary information into code numerals which are punched into cards. (This is where your individual data cards are first compiled.)

The punched cards are then fed into a computer processing unit which controls a system of magnetic tape recordings. From the information contained in the cards, the tapes are brought up to date. Then, copies of the tapes are forwarded to the Bureau. This Bureau makes a new master tape each month which reflects the current over-all manpower picture as drawn by the PAMIs.

This information is the basis for "making you available" to an EPDO or detailer for transfer when your normal tour of sea or shore duty has been completed. Although the bookkeeping and filing of data is accomplished chiefly by machines, you are not merely a

4th Naval District



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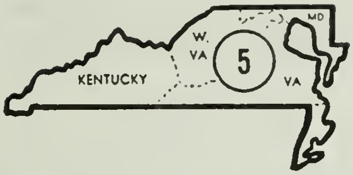
Akron, Ohio							⚓																
Atlantic City, N. J.							⚓																
Camden, N. J.							⚓												⚓				
Cape May, N. J.																					⚓		
Cincinnati, Ohio	⚓						⚓																
Cleveland, Ohio	⚓				⚓		⚓																
Columbus, Ohio	⚓	⚓					⚓																
Johnsville, Pa.			⚓																				
Lakehurst, N. J.			⚓				⚓				⚓												
Mechanicsburg, Pa.					⚓																		
Oxford, Pa.		⚓																					
Philadelphia, Pa.	⚓	⚓	⚓	⚓	⚓	⚓	⚓				⚓	⚓	⚓					⚓	⚓	⚓			
Pine Beach, N. J.											⚓												
Pittsburgh, Pa.	⚓						⚓																
Princeton, N. J.		⚓																					
Trenton, N. J.			⚓				⚓								⚓								
University Park, Pa.		⚓																					
Villanova, Pa.		⚓																					
Willow Grove, Pa.			⚓																				
York, Pa.							⚓										⚓						

*Naval Reserve Training Centers are also located in the following cities: PENNSYLVANIA: Allentown, Altoona, Bethlehem, Folsom, Erie, Harrisburg, Hazleton, Johnstown, Lancaster, McKeesport, Reading, Scranton, Kingston, Williamsport. OHIO: Canton, Dayton, Hamilton, Lima, Lorain, Mansfield, Portsmouth, Steubenville, Toledo, Warren, Youngstown, Zanesville. DELAWARE: Wilmington.

**Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.

5th Naval District

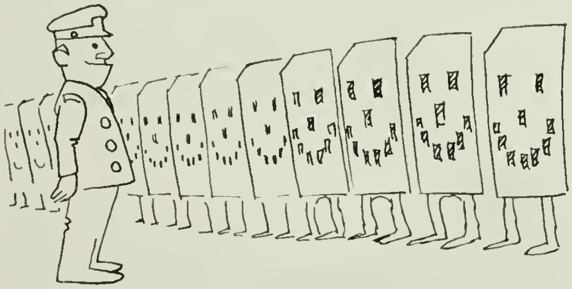


	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Ashland, Ky.	⚓																						
Bainbridge, Md.										⚓	⚓		⚓										
Baltimore, Md.	⚓						⚓													⚓		⚓	
Buxton, N. C.																					⚓		
Charlottesville, Va.		⚓																					
Camp Lejeune, N. C.												⚓											
Driver, Va.															⚓								
Fort Monroe, Va.																	⚓						
Fort Ritchie, Md.															⚓								
Little Creek, Va.														⚓									
Louisville, Ky.	⚓	⚓					⚓										⚓						
Newport News, Va.							⚓												⚓				
Norfolk, Va.			⚓	⚓	⚓	⚓	⚓	⚓			⚓	⚓	⚓	⚓	⚓	⚓				⚓		⚓	
Northwest, Va.															⚓								
Portsmouth, Va.							⚓				⚓	⚓					⚓	⚓	⚓				
Richmond, Va.	⚓						⚓																
Virginia Beach, Va.			⚓								⚓												
Yorktown, Va.																	⚓						

*Naval Reserve Training Centers are also located in the following cities: VIRGINIA: Augusta County, Lynchburg, Roanoke. WEST VIRGINIA: Huntington, Charleston, Wheeling. KENTUCKY: Covington, Lexington, Owensboro. MARYLAND: Cumberland.

**Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.

number or statistic. *Machines are necessary for the efficient processing and storage of data. When it comes to moving or extending you, or making any other decision, it is personally handled by an experienced officer who uses information provided by machine accounting.*



Rate Determines Length of Shore Tour

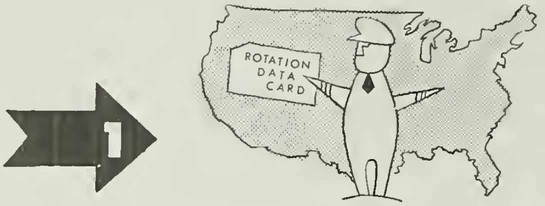
If you're ordered to a normal tour of shore duty under Seavey, it means you will spend anywhere from two years to 54 months, depending on your rate, on continuous shore duty. Normal shore tours are:

- 24 MONTHS — BM1,2,3, BMSN; QM1,2,3, QMSN; SM1,2,3, SMSN; RD1,2,3, RDSN; SO1,2,3, SOSN; TM1,2,3, TMSN; GMT3, GMTSN; MN3, MNSN; GMC1,2,3, GMSN; FTC1,2,3, FTSN; MT3, MTSN; ET3, ETSN; IM1,2,3, IMSN; OM1,2,3, OMSN; RM1,2,3, RMSN; SK1,2,3, SKSN; DK2,3, DKSN; CS1,2,3, CSSN; SH1,2,3, SHSN; LIC,1,2,3, LISN; MMC,1,2,3, MMFN; EN1,2,3, ENFN; MR1,2,3, MRFN; BR1, BTC1,2,3, BTFN; EMC1,2,3, EMFN; IC1,2,3, ICFN; DC1,2,3, DCFN; PM1,2,3, PMFN; ML1,2,3, MLFN; SFC1,2,3, SFFN; EA1,2,3, EACN; CE1,2,3, CECN; CM3, CMCN; BU1,2,3, BUCN; SW1,2,3, SWCN; UT1,2,3, UTCN; AT3, ATAN; AO2,3, AOAN; AC3, ACAN; AB2,3, ABAN; AEAN; AQ3, AQAN; AGAN; PH3, PHAN; PTC1,2,3, PTAN; HN; DN; SD1,2,3; TN.
- 30 MONTHS — BMC; SMC; RDC; SOC; TMC; ET1,2; IMC; OMC; RMC; SKC; CSC; SHC; ENC; BRC; ICC; PMC; MLC; EAC; CEC; EOC1,2,3, EOSN; CMC1,2; BUC; SWC; UTC; AT2; AB1; AE3; AG3; SDC.
- 36 MONTHS — QMC; GMTC1,2,; MN2; ETC; YN3, YNSN; PN3, PNSN; DK1; JO3, JOSN; DM3, DMSN; MRC; DCC; ADC1,2,3, ADAN; ATC1; AOC1; AC2; ABC; AEC1,2; AQC1,2; AMC1,2,3, AMAN; PR1,2,3, PRAN; AG1,2; AK1,2,3, AKAN; PHC1,2; HM3; DT2,3.
- 42 MONTHS — MNC1; MTC1,2; DKC; ADJC1; PRC; AKC; HM2.
- 48 MONTHS — YNC,1,2; PN1,2; JO1,2; ACC, 1; TDC,1,2,3, TDAN; HMC,1; DT1.
- 54 MONTHS — PNC; JOC; DMC1,2; DTC.

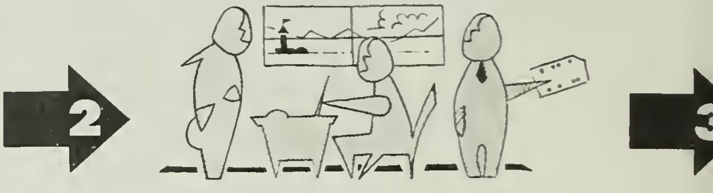
Tour lengths for men in pay grades E-8 and E-9 are the same as those listed for corresponding E-7 tours. Tour lengths for men in the new DS rating have not yet been established. (*Continued on page* 35).

SHORVEY

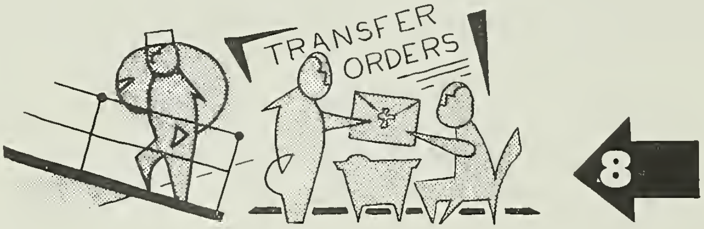
SHORVEY... movin



Approximately 12 months before completing your normal tour of shore duty, PAMICONUS (or PAMI-LANT or PAC if you are on Fleet shore duty) forwards your rotation data card to your station and instructs your CO to interview you in regard to your choices of sea or overseas duty.



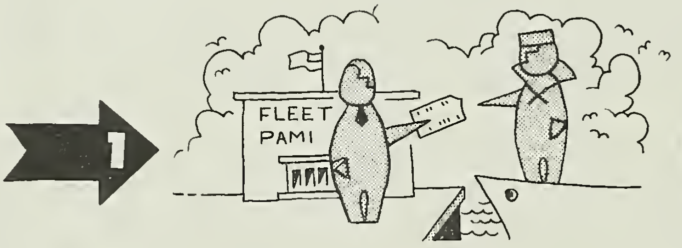
You are called to the personnel office, and, with a personnelman's assistance, you fill out your rotation data card, listing your choices for next sea or overseas duty. Your rotation data card is then returned by the fastest means to the PAMI.



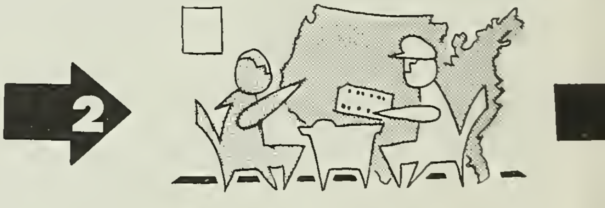
Upon receipt of your assignment card, the shore station will issue standard transfer orders for detachment during a specified month (normally the month in which you complete a tour ashore). You will then be directed to the assigned sea duty, and your orders will authorize proceed and travel time, as well as leave.

After determining your next duty assignment, the Fleet EPDO forwards the assignment card to your present shore station. At the same time your deck of data cards is forwarded to your next duty station to assist your next CO in placing you in the right job.

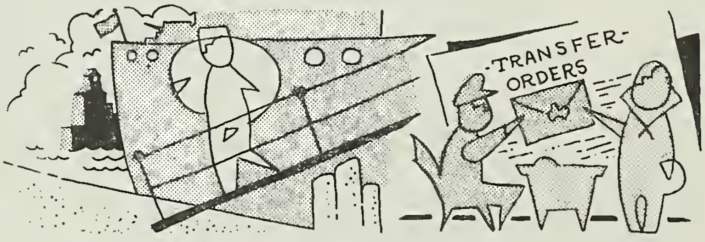
SEAVEY... moving



A BuPers Notice each year announces sea duty commencement cutoff dates for each rating. PAMI selects you as eligible for transfer if you have been at sea long enough to meet the cutoff date requirement, and issues a rotation data card to your ship or duty station.



You are then called to the personnel office where, with the p
sonnelman's assistance, you indicate on the rotation data c
your shore duty and/or overseas duty preferences. You n
also indicate that you desire recruiting duty and/or instruc
duty. Your rotation data card is reviewed by your CO
then forwarded, by the fastest means available, to the Fl
PAMI. An entry to this effect is made in your service reco



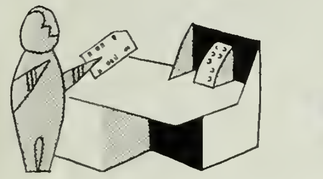
Upon receipt of your assignment card, your ship will issue standard transfer orders for detachment during a specified month, and you will be directed to report to your shore duty station. Your orders will authorize proceed and travel time, and leave.

The shore duty distributor will, upon assignin
your deck of data cards to your new duty s
ship. The data cards will aid your new duty
for which you are best qualified. The assign
to your CO directing him to transfer you to

Prepared by All Hands Magazine

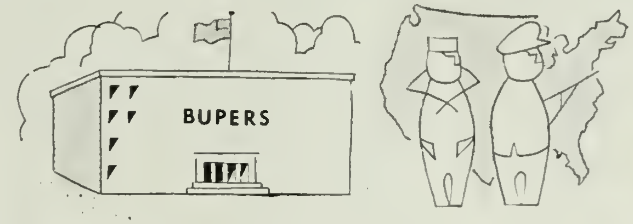
nd SEAVEY

ou from shore to sea



e PAMI takes the information from your
tation data card (and other information
out you it already has on file) and converts
s to punched card codes and symbols. A
ck of about four data cards is then punched
d transmitted to the Bureau.

4



Using all information from your deck of data cards (which the Bureau assembled into the Shorvey), Bureau assignment officers make you available to either the Atlantic or Pacific Fleet EPDO for further assignment to sea or overseas duty. The information on your assignment card and your data card is then relayed by transceiver to the appropriate Fleet EPDO to assist in assigning you to a Fleet command. This action takes place about four months before you complete your normal tour. Some men on the Shorvey are assigned to schools or to Bureau-controlled billets.

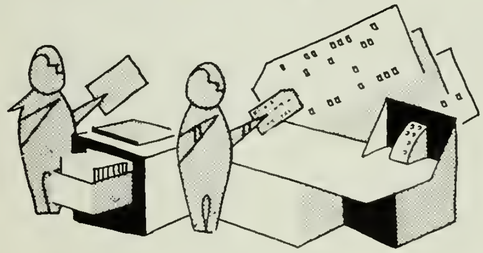
5

The Bureau sends, via EPDOCONUS, a copy of the No. 1A data card to the shore station where you are serving. This card tells the shore distributor he is losing a man from an activity under his jurisdiction and lets you and your CO know the month when you will be transferred. It also tells you the EPDO or detailer to whom you have been made available for further assignment.

6

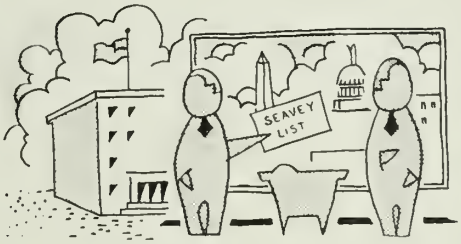
When the EPDO receives your assignment card and deck of data cards from the Bureau (step 4 above), it uses all this information to make a decision as to the ship, Fleet command or overseas activity to which you will be assigned.

u from sea to shore



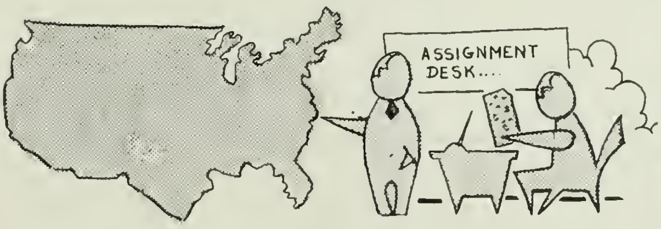
At the Fleet PAMI the information on your rotation data card is added to other information about you, which the PAMI has on file, and is converted to punched card symbols and codes. Then, by means of transceivers, this information is transmitted electronically to the Bureau.

4



At the Bureau, the names received from the Fleet PAMIs are compiled into a single Seavey list by rate and length of service. You are then made available to the appropriate EPDO or detailer to fill a shore vacancy when it occurs. The information on your data cards (including choice of duty) is used by the detailer in deciding which shore billet you will fill.

5



EPDOassigns you to a specific shore station under its jurisdiction, or, if your rating is controlled by the Bureau, the Bureau will select your new station.

6

to a specific duty station, forward
and your assignment card to your
CO in assigning you to that duty
card your ship receives is an order
cific duty station ashore.

SEAVEY-SHORVEY ROUNDUP

6th Naval District

	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Athens, Ga.											⚓												
Atlanta, Ga.		⚓					⚓																
Auburn, Ala.		⚓																					
Beaufort, S. C.												⚓											
Birmingham, Ala.	⚓						⚓																
Byron, Ga.					⚓																		
Brunswick, Ga.			⚓								⚓												
Cecil Field, Fla.			⚓																				
Chapel Hill, N. C.		⚓																					
Charleston, S. C.					⚓	⚓	⚓	⚓			⚓	⚓	⚓			⚓	⚓	⚓	⚓	⚓			
Charlotte, N. C.							⚓																
Columbia, S. C.	⚓	⚓					⚓																
Durham, N. C.		⚓					⚓																
Ft. Lauderdale, Fla.																	⚓						
Gulfport, Miss.							⚓	⚓															
Homestead, Fla.																				⚓			
Jacksonville, Fla.	⚓		⚓		⚓		⚓	⚓			⚓	⚓								⚓			
Key West, Fla.			⚓			⚓					⚓	⚓					⚓						
Macon, Ga.	⚓																⚓						
Marietta, Ga.			⚓																				
Mayport, Fla.						⚓																	
Memphis, Tenn.			⚓		⚓		⚓				⚓	⚓											
Meridian, Miss.			⚓																				
Miami, Fla.							⚓													⚓			
Milton, Fla.			⚓																				
Nashville, Tenn.	⚓	⚓					⚓																
Orlando, Fla.																							⚓
Panama City, Fla.																	⚓						⚓
Pensacola, Fla.			⚓				⚓				⚓	⚓			⚓								
Raleigh, N. C.	⚓						⚓																
Sanford, Fla.			⚓																				
St. Petersburg, Fla.											⚓												
University, Miss.		⚓																					

*Naval Reserve Training Centers are also located in: NORTH CAROLINA: Asheville, Wilmington, Winston-Salem, Greensboro. GEORGIA: Augusta, Columbus, Macon, Savannah. TENNESSEE: Chattanooga, Jackson, Kingsport, Knoxville. FLORIDA: Daytona Beach, Gainesville, Orlando, Riviera Beach, St. Petersburg, Tampa. ALABAMA: Gadsden, Huntsville, Mobile, Montgomery, Sheffield, Tuscaloosa. MISSISSIPPI: Greenville, Greenwood, Jackson, Laurel, Natchez, Vicksburg. SOUTH CAROLINA: Georgetown, Greenville, Spartanburg.

**Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.

Extension of Duty Tours

If, for some reason or other, you don't wish to be transferred, what are the chances you will be granted an extension of duty at your present command?

Let's take a shore duty extension first.

If you're on *shore duty*, an extension of your tour will be considered by the Chief of Naval Personnel only on the basis of urgent manning or humanitarian problems. When you receive your Shorvey rotation data card you may request that the Chief of Naval Personnel extend your shore tour for a specified period. You must fully justify the request, and your rotation data card must be completed and returned to the PAMI on schedule.

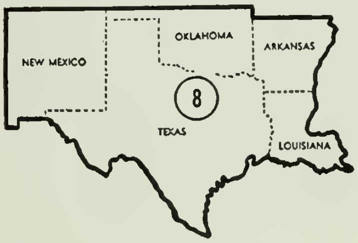
If your extension is granted, your CO will be instructed to make the necessary changes in the Naval Manpower Information System and to correct your shore tour completion date. If your request for extension is not granted, you will be notified by letter.

Conversely, if you are serving on shore duty, you would not usually be returned to sea duty until you have completed the normal tour for your rating. If for some reason you are sent to sea before your normal tour of shore duty has been completed, the transfer must first be fully justified by your CO and approved by the Chief of Naval Personnel. Even if your shore activity should be disestablished, every effort would be made to reassign you to another shore station for completion of the normal tour..

Extending Sea Tours

If you *wish to extend your tour at sea,* your request to the Chief of Naval Personnel should be based on "sincere desire" for arduous sea duty, or personal hardship. Your request for extension on the basis of personal hardship must include substantiating affidavits.

8th Naval District



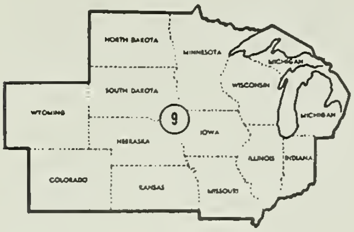
	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Albuquerque, N. M.	⚓	⚓					⚓										⚓						
Austin, Tex.		⚓					⚓																
Beeville, Tex.			⚓																				
Camden, Ark.																	⚓						
Corpus Christi, Tex.			⚓				⚓				⚓	⚓											
Dallas, Tex.	⚓		⚓				⚓																
Galveston, Tex.							⚓															⚓	
Houston, Tex.	⚓	⚓					⚓																
Kingsville, Tex.			⚓																				
Little Rock, Ark.	⚓						⚓																
McAlester, Okla.							⚓										⚓						
New Iberia, La.			⚓																				
New Orleans, La.	⚓	⚓	⚓		⚓	⚓	⚓						⚓						⚓	⚓		⚓	
Norman, Okla.		⚓					⚓				⚓												
Oklahoma City, Okla.	⚓						⚓																
Port Arthur, Tex.							⚓																
Shumaker, Ark.							⚓																
White Sands, N. M.																							⚓

***Naval Reserve Training Centers are also located in the following cities: LOUISIANA: Alexandria, Lake Charles, Lafayette, Shreveport, Baton Rouge. OKLAHOMA: Stillwater, Tulsa. ARKANSAS: Fort Smith. TEXAS: Amarillo, Beaumont, El Paso, Fort Worth, Lubbock, San Angelo, San Antonio, Waco, Wichita Falls, Abilene.**

****Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.**

SEAVEY-SHORVEY ROUNDUP

9th Naval District



	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Ames, Iowa		⚓																					
Ann Arbor, Mich.		⚓																					
Boulder, Colo.		⚓																					
Chicago, Great Lakes, Ill.	⚓	⚓			⚓		⚓			⚓	⚓	⚓	⚓						⚓	⚓		⚓	⚓
Cheyenne, Wyo.							⚓																
Columbia, Mo.		⚓																					
Colorado Springs, Colo.							⚓																
Crane, Ind.																	⚓						
Denver, Colo.	⚓						⚓																
Des Moines, Iowa	⚓						⚓																
Detroit, Mich.	⚓						⚓																
Evanston, Ill.		⚓					⚓																
Fargo, N. D.							⚓																
Forrest Park, Ill.							⚓										⚓						
Glenview, Ill.			⚓				⚓				⚓												
Grosse Ile, Mich.			⚓																				
Hastings, Nebr.																	⚓						
Hutchinson, Kan.							⚓																
Indianapolis, Ind.	⚓						⚓																
Kansas City, Mo.	⚓						⚓																
Lawrence, Kan.		⚓																					
Lincoln, Nebr.		⚓					⚓																
Madison, Wis.		⚓					⚓																
Milwaukee, Wis.	⚓	⚓					⚓																
Minneapolis, Minn.	⚓	⚓	⚓				⚓																
Olathe, Kan.			⚓								⚓												
Omaha, Nebr.	⚓						⚓																⚓
St. Louis, Mo.	⚓						⚓																
South Bend, Ind.		⚓					⚓																
Urbana, Ill.		⚓																					
West Lafayette, Ind.		⚓																					
Wichita, Kans.							⚓																

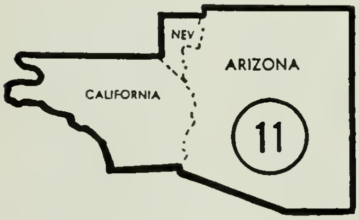
*Naval Reserve Training Centers are also located in the following cities: INDIANA: Anderson, Evansville, Fort Wayne, Gary, Michigan City, Muncie, Terre Haute. ILLINOIS: Aurora, Danville, Decatur, Joliet, Rockdale, Moline, E. Peoria, Quincy, Rockford, Springfield. MICHIGAN: Battle Creek, Bay City, Benton Harbor, Cadillac, Dearborn, Flint, Grand Rapids, Hancock, Jackson, Kalamazoo, Lansing, Muskegon, Pontiac, Port Huron, Saginaw. IOWA: Burlington, Cedar Rapids, Davenport, Dubuque, Sioux City, Waterloo. MISSOURI: Cape Girardeau, Hannibal, Joplin, St. Joseph, Springfield. WISCONSIN: Green Bay, Kenosha, Lacrosse, Oshkosh, Racine, Sheboygan. COLORADO: Pueblo. KANSAS: Topeka. S. DAKOTA: Sioux Falls. MINNESOTA: St. Paul, Duluth.

**Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.

From time to time it becomes necessary to involuntarily extend the sea tours of some men. Examples of *involuntary sea extensions* are:

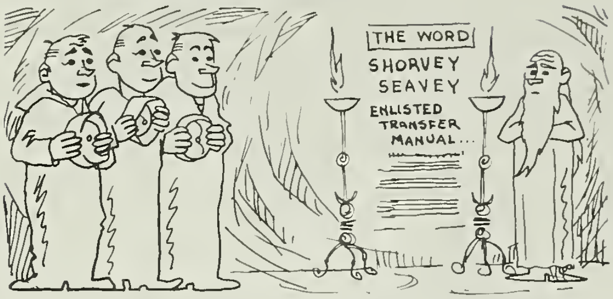
- If you are serving on overseas shore duty — When you become eligible for rotation to shore duty in the U. S., you must be moved in the month your tour of overseas duty is completed. Since there are not always enough U. S. shore vacancies to accommodate all the men who complete overseas duty tours, it may become necessary to return your name to the Fleet EPDO for further assignment to sea duty. Your sea tour is extended 14 months in the name of Fleet stability. (*Enlisted Transfer Manual*, Para. 3.33C, contains more details.)
- You do not have sufficient obligated service — If you are serving on overseas shore duty and do not have sufficient obligated service for rotation ashore (the minimum: 16 months) you will be extended at sea for 14 months. (The 14-month extension may be beyond your EAOS. However, it would not change your EAOS. A full explanation may be found in the *Transfer Manual*, Para. 3.57C.)
- EAOS — If you elect to leave your sea duty command when your hitch has been completed and reenlist at a receiving or recruiting station, you will be temporarily removed from Seavey and extended on sea duty until the next annual submission of rotation data cards for your segment.
- New Ship — If you are transferred to a new construction ship, your sea tour is extended to permit one year on board after the commissioning date. This is necessary to provide stability for pre-commissioning details and initial operations.
- Key Man — If you are a key man in your ship's organization and your transfer without relief would significantly affect your unit's operational capability,

11th Naval District



	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Camp Pendleton, Calif.												⚓											
China Lake, Calif.			⚓														⚓						
Corona, Calif.																	⚓						
El Centro, Calif.																							⚓
Hawthorne, Calif.							⚓																
Imperial Beach, Calif.			⚓												⚓								
Las Vegas, Nev.							⚓																
Long Beach, Calif.			⚓			⚓	⚓					⚓						⚓	⚓	⚓			
Los Angeles, Calif.	⚓	⚓			⚓		⚓													⚓			
Miramar, Calif.			⚓																				
Phoenix, Ariz.			⚓				⚓																
Point Arguello, Calif.																							⚓
Point Mugu, Calif.			⚓														⚓				⚓		
Pomona, Calif.							⚓				⚓												
Port Hueneme, Calif.					⚓				⚓		⚓												
San Diego, Calif.			⚓		⚓	⚓	⚓	⚓		⚓	⚓	⚓	⚓	⚓	⚓	⚓				⚓			⚓
San Pedro, Calif.							⚓	⚓															
Santa Ana, Calif.							⚓																
Seal Beach, Calif.																	⚓						
Wilmington, Calif.																						⚓	

***Naval Reserve Training Centers are also located in the following cities: CALIFORNIA: Bakersfield, Compton, N. Hollywood, Huntington Park, Pasadena, San Bernardino, Santa Barbara, Santa Monica. ARIZONA: Tucson.**



your CO may request an "operational hold" for any period up to six months. There must be an urgent need for your services. (OPHOLDS are spelled out in the *Transfer Manual*, Para. 3.33b.)

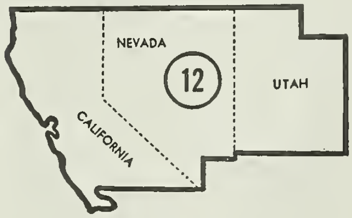
'Inactive Seavey' Is Active Too

The term "Inactive Seavey" can be misleading. In theory – and in practice – Seavey is an active, continuously working system which handles the process of transferring you to shore duty after a tour at sea. Therefore, Seavey is not "inactive."

Nevertheless, the term "Inactive Seavey" has been adopted (ALL HANDS does not know who dreamed it up) and is now accepted as standard Seavey lingo. When the term is used correctly, however, it's in a sense that applies not to the Seavey system, but to the men who come under it.

You are on the Seavey ("Active" Seavey, if you prefer) when you are eligible in all respects for a Seavey transfer. If for some reason (such as having insufficient obligated service, or being on TAD) Seavey can't transfer you, your data is pigeonholed and no action is taken until the temporary obstacle in the path of your transfer is removed. (If this temporary obstacle is "insufficient obligated service," it means you have less than 16 months left on your hitch. You may remedy this by signing an agreement to extend your enlistment, which would become effective only if you are actually assigned ashore. More on the insufficient obligated

12th Naval District

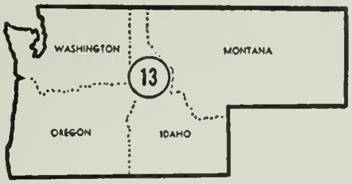


	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Naval Facility	Hydrographic Office	Intelligence Office	Other
Alameda, Calif.			⚓				⚓				⚓												
Berkeley, Calif.		⚓																					
Big Sur, Calif.																				⚓			
Concord, Calif.																	⚓						
Dixon, Calif.															⚓								
Dugway, Utah																	⚓						
Fallon, Nev.			⚓																				
Ferndale, Calif.																				⚓			
Hawthorne, Nev.																	⚓						
Lemoore, Calif.			⚓																				
Moffett Field, Calif.			⚓																				
Monterey, Calif.			⚓				⚓				⚓												
Oakland, Calif.					⚓						⚓	⚓											
Ogden, Utah					⚓		⚓																
Salt Lake City, Utah		⚓					⚓																
San Francisco, Calif.	⚓			⚓	⚓	⚓	⚓	⚓			⚓	⚓	⚓					⚓	⚓			⚓	⚓
San Bruno, Calif.																				⚓			
Sonoma, Calif.															⚓								
Stockton, Calif.					⚓		⚓								⚓								⚓
Stanford, Calif.		⚓																					
Vallejo, Calif.		⚓			⚓		⚓				⚓	⚓			⚓			⚓	⚓				

*Naval Reserve Training Centers are also located in the following cities: CALIFORNIA: Fresno, Sacramento, San Jose, San Mateo, Santa Cruz. NEVADA: Reno.

**Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.

13th Naval District



	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Astoria, Ore.																							⚓
Bayview, Idaho																							⚓
Bremerton, Wash.					⚓							⚓					⚓	⚓	⚓				
Butte, Mont.	⚓						⚓																
Corvallis, Ore.		⚓																					
Empire, Ore.																					⚓		
Idaho Falls, Idaho											⚓												
Keyport, Wash.																	⚓						
Kingston, Wash.								⚓															
Marietta, Wash.																				⚓			
Moscow, Idaho		⚓																					
Oak Harbor, Wash.			⚓																				
Oso, Wash.															⚓								
Pacific Beach, Wash.																					⚓		
Portland, Ore.	⚓						⚓																
Seattle, Wash.	⚓	⚓	⚓		⚓		⚓						⚓		⚓				⚓	⚓		⚓	
Spokane, Wash.							⚓																
Tacoma, Wash.							⚓																

***Naval Reserve Training Centers are also located in the following cities: WASHINGTON: Aberdeen, Bellingham, Everett, Longview. MONTANA: Billings. IDAHO: Boise. OREGON: Eugene, Salem.**

****Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.**

service obstacle is contained in the *Enlisted Transfer Manual,* Para. 3.37.)

Thus, when you are placed on the "Inactive Seavey," the only thing inactive is your file; you are not actively considered for transfer.

Questions and Answers

Q—*Nearly everything about the EAOS (expiration of active obligated service) procedure for determining the length of a shore tour seems simple enough to understand. What confuses me is this: If my normal tour of shore duty expires at the same time my enlistment expires, and I wait until then to extend or reenlist, I will be transferred back to sea immediately. As* All Hands *puts it (August 1961), since no advance notice has been given the distributors my chances of getting the duty of my choice are not always good. Therefore, I am encouraged to obligate myself when first reporting ashore. Should this obligation necessarily be made when first reporting? Why can't it be done at any time during the shore tour, as long as the transfer people have some notice ahead of time?*

A—You may at any time increase your obligated service by reenlisting or extending. The more time you give the distributors to consider your assignment, the better the job they'll do giving you your duty choice.

Q—*Here's a hypothetical situation which may reveal an unjust aspect of Seavey: Three QM1s are stationed in the same ship. All are eligible for Seavey transfers. QM1 number one has 12 years' continuous active duty and five years' continuous sea duty. QM1 number two has 10 years' continuous active duty and six years' continuous sea duty. QM1 number three has 14 years' continuous active duty and four years' continuous sea duty. Under the Seavey, the third QM1 would go ashore*

What's a 'B' Billet?

"B" billet is a common Seavey-Shorvey term that refers to any billet filled directly by a detailer in the Bureau of Naval Personnel. A complete listing of these billets by general category is contained in the *Enlisted Transfer Manual,* Para. 3.21a.

"B" billets normally require men who have received special training or who possess special qualifications. Before you are assigned to a "B" billet, your service record is reviewed by a Bureau detail officer. He makes sure you are fully qualified for the billet before making the assignment.

The Enlisted Transfer Manual

If there's some point you don't understand about Seavey-Shorvey, you may wish to consult the *Enlisted Transfer Manual* (NavPers 15909). The *Transfer Manual* is the official guide to the Seavey-Shorvey program, and explains in detail many points that may be peculiar to you or your rating. Chapter 1 describes the Navy enlisted destribution system, manpower requirements and the need for an effective rotation program. Chapter 3 is all about Seavey, and Chapter 7 describes the working of Shorvey. Other chapters of the *Transfer Manual* concentrate on assignments to recruiting duty, instructor duty, overseas shore duty, submarine duty, service schools and the distribution of Waves. If the numbers and letter codes of punch cards baffle you, Chapters 24 and 25 spell them out as easy as ABC.

first even though he has had two years less sea duty than QM1 number two, and one year less sea duty than QM1 number one. Is this fair?

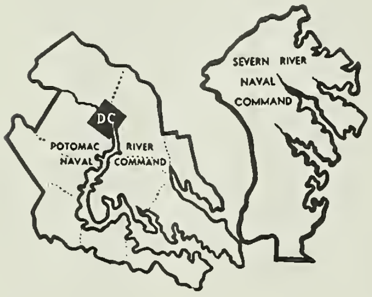
A — The yearly Seavey cutoff date for each rating establishes a man's eligibility for a specific Seavey year. In the case of the QM1s, each man had served the prescribed sea time for his rate and was recorded on the Seavey. However, which QM1 goes ashore first is determined by his active duty base date (how long he has been on active duty) — not by how long he has been at sea. The reason is this: On the average, a man who has been in the Navy 14 years will have served at sea longer than a man who has been in the Navy only 10 years. As we've seen in the case of the QM1s, this may not always be true. Nevertheless, the ruling applies to everyone. A QM1 who has less active duty, but more sea time than another QM1, is usually an exception. In the long run, the junior QM1 will eventually receive the preferred treatment when he becomes senior.

Q — Does a married man's request for shore duty receive special handling by Seavey? Out of six SH1s in my area, of which I am one, five were sent to shore duty. The five are married. I'm still waiting for orders. I'm unmarried.

A — Married men receive no more consideration than single men.

Q — Why is it the unmarried Navymen are picked by the Seavey ahead of married men? Time and time again I've seen married men sweating out a wait for transfer orders while the single guys have nothing to worry about.

A — Single men receive no more consideration than married men.



	Recruiting Station**	NROTC	NAS/Naval Air Activity	Receiving Station	Supply/Disbursing Activity	Naval Station/Base	Naval Reserve Training Cen.*	Service Craft Activity	Construction Battalion Cen.	Recruit Training Center	School Command/NATTU	Naval Hospital/Med. Act.	PAMI	Amphibious Base	Communications/Radio Sta.	Fleet Training Center	Ordnance Depot/Activity	Shipyard	Indust. Mgr. Off.	Intelligence Office	Naval Facility	Hydrographic Office	Other
Adelphi, Md.							⚓																
Alexandria, Va.							⚓																
Annapolis, Md.			⚓		⚓	⚓					⚓	⚓			⚓								⚓
Arlington, Va.															⚓					⚓			⚓
Bethesda, Md.											⚓	⚓											
Carderock, Md.																							⚓
Cheltenham, Md.															⚓								
Dahlgren, Va.																	⚓						⚓
Ft. Belvoir, Va.											⚓												
Ft. Meade, Md.																				⚓			
Indian Head, Md.											⚓						⚓						
Patuxent River, Md.			⚓																				
Quantico, Va.												⚓											
Silver Spring, Md.																	⚓						
Solomons, Md.																	⚓						
Washington, D. C.	⚓		⚓	⚓	⚓	⚓	⚓	⚓			⚓	⚓			⚓		⚓		⚓	⚓		⚓	⚓
Yorktown, Va.																	⚓						

**Recruiting sub-stations or branches are too numerous to list. Therefore, only the main stations in each district are indicated.

Examples of how to fill in your Rotation Data Card

SEAVEY ROTATION DATA CARD

Home port numbered codes here indicate that Jones desires shore duty within the continental U. S. In the Seavey home port codes represent broad type of duty preferred.

Lettered codes for cities where Naval activities are located, such as
KSD—San Diego
LFO—San Francisco
MSE—Seattle
Jones indicates in these blocks his location preferences for shore duty.

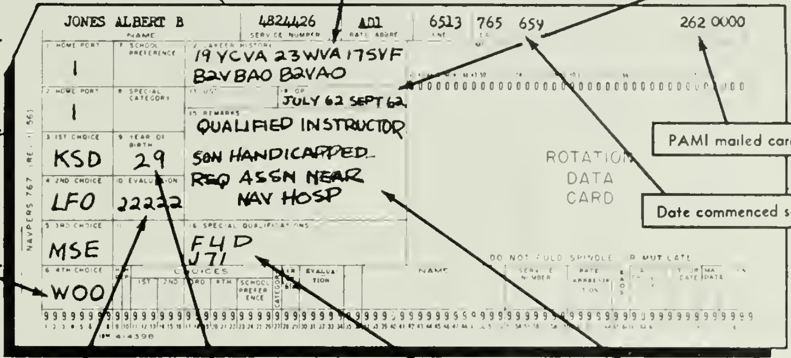
Identifying information: name, rate, etc., punched and printed by PAMI.

CAREER HISTORY

Covers approximately 10 years' naval service. Numbers indicate period served on board ship or station. When this card was submitted for Jones, he was attached to a CVA. The first code indicates that he has served on board 19 months. His CVA is based in "Y" San Diego. Before this he was attached to an attack squadron based in San Francisco.—etc.

OPERATION

Jones' CO has indicated here that the ship will be operating on a heavy schedule and that Jones' services are urgently required from July through September.


JONES ALBERT B | 4824426 | AD1 | 6513 | 765 | 659 | 262 0000
NAME | SERVICE NUMBER | RATE ABBRE

1 HOME PORT: I
7 SCHOOL PREFERENCE:
CAREER HISTORY: 19 YCVA 23 WVA 17 SVF B2VBAO B2VAO
2 HOME PORT: I
8 SPECIAL CATEGORY:
OP: JULY 62 SEPT 62
15 REMARKS: QUALIFIED INSTRUCTOR SON HANDICAPPED REQ ASSN NEAR NAV HOSP
3 1ST CHOICE: KSD
9 YEAR OF BIRTH: 29
4 2ND CHOICE: LFO
10 EVALUATION: 22222
5 3RD CHOICE: MSE
16 SPECIAL QUALIFICATIONS: F4D J71
6 4TH CHOICE: WOO

PAMI mailed card this date.

Date commenced sea tour.

JONES indicated in 4th choice he would like duty "anywhere west of Mississippi."

EVALUATION CODE

Filled in by Jones' CO. Evaluation shown here taken from enlisted performance record and converted to code. "1" represents outstanding, etc.

Born 1929.

SPECIAL QUALIFICATIONS

Jones is a qualified jet mechanic. Other qualifications might be "fuel," "AEW," etc.

ADDITIONAL REMARKS

Information that Jones or his CO wish to bring to the attention of the assignment officers.

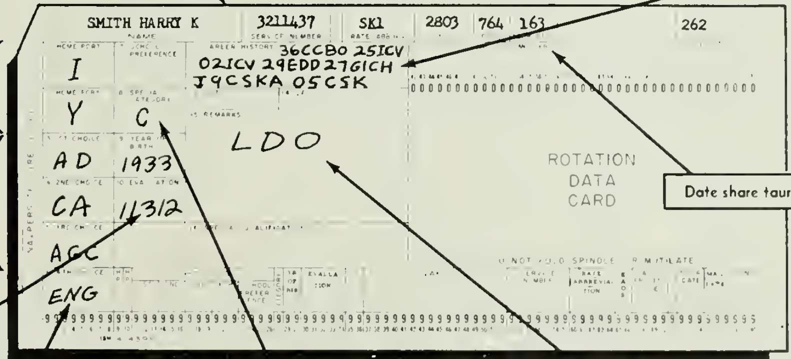
SHORVEY ROTATION DATA CARD

When Smith goes to sea he wants to be based in Norfolk. However, if he can't have the East Coast, then he prefers a West Coast ship based in San Diego.

Identifying information: name, rate, etc., punched and printed by PAMI.

CAREER HISTORY

At the time of submitting the rotation data card, Smith was attached to an activity in Boston. The special category code (3rd digit "C") indicates he was an instructor. Before this he served in a carrier based in Norfolk. He completed SK "C" independent duty school in Nov 1959. Previously he attended SK "A" school.


SMITH HARRY K | 3211437 | SK1 | 2803 | 764 | 163 | 262
NAME | SERVICE NUMBER | RATE ABBRE

HOME PORT: I
SCHOOL PREFERENCE:
CAREER HISTORY: 36CCBO 25ICV 02ICV 29EDD 27GICH J9CSKA 05CSK
HOME PORT: Y
8 SPECIAL CATEGORY: C
15 REMARKS: LDO
1ST CHOICE: AD
9 YEAR OF BIRTH: 1933
2ND CHOICE: CA
10 EVALUATION: 11312
3RD CHOICE: AGC
4TH CHOICE: ENG

ROTATION DATA CARD
DO NOT FOLD SPINDLE OR MUTILATE

DUTY CHOICES

For sea duty Smith wants an AD, CA, or AGC in that order.

Date shore tour expires

EVALUATION CODE

Filled in by Smith's CO. Evaluation shown here taken from enlisted performance record and converted to code. "1" represents outstanding, etc.

SPECIAL CATEGORY

Indicates Smith is an instructor duty.

Smith has been selected for commissioned grade, and his CO wishes to bring this to the attention of the distribution officers.

OVERSEAS CHOICE

If he must go overseas, he wants to go to England.

Key step in SEAVEY/SHORVEY Rotation Program is filling out your rotation data card aboard your activity. Information from these cards is used in making all sea and shore assignments.

For breakdown of full meaning of all codes used see the **Enlisted Transfer Manual,** Chapter 25.

This Chart Shows Distribution of Billets

Ratings not listed — CT, MA, MU, TD, AC, AG (E-7,8,9) — and all enlisted women, are not assigned under Seavey/Shorvey. Assignments for these personnel are made on an individual basis by EPDOCONUS or BuPers. Billets for E-8 and E-9 (master and senior chief) personnel are included in E-7 billet listings. Billets for the service ratings (like SOG) are included in the general (SO) listings.

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Shore Billets (includes District and Fleet Shore Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).											
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC	SRNC
Boatswain's Mate	BMC	629	591	114	222	73	59	42	93	134	36	111	183	59	23	75	13
	BM1	910	856	72	202	38	38	38	75	89	26	88	108	69	36	57	20
	BM2	1431	1311	82	232	35	33	22	73	104	26	34	161	81	25	60	8
	BM3/SN	1669	1580	122	292	37	21	18	60	103	22	2	88	38	20	36	16
Quartermaster	QMC	282	213	31	50	36	23	13	38	35	19	42	61	32	13	14	2
	QM1	421	356	18	48	14	23	9	33	54	40	71	33	32	17	11	3
	QM2	575	457	16	54	19	12	19	35	16	7	22	41	25	4	8	6
	QM3/SN	656	539	11	53	7	2	6	21	10	2	1	25	17	1	15	
Signalman	SMC	202	185	4	7	7	10	12	19	24	24	51	51	5	5	11	1
	SM1	398	322	2	11	7	1	12	24	38	23	58	51	15	5	11	
	SM2	543	497	5	18	5	6	4	13	53	17	5	28	17	2	3	
	SM3/SN	721	698	6	18	1	2	4	10	21	5	1	16	14	1	4	
Radarman	RDC	235	215	10	9	7	10	3	21	20	6	57	53	40	1	5	
	RD1	573	505	11	24	23	8	20	35	54	13	40	87	47	11	6	1
	RD2	1058	870	7	15	14	14	25	41	61	16	33	66	38	7	6	3
	RD3/SN	2807	2323	31	11	2	3	2	16	82	6	1	60	28	6	3	
Sonarman	SOC	313	213	8	15	4	6	7	10	78	2	17	72	14	5	6	
	SO1	466	305	11	17	10	10	13	23	111		36	68	18	8	3	
	SO2	732	456	8	8	8	5	10	15	77	4	3	31	23	13	2	1
	SO3/SN	1294	938		12	11	1	9	18	16			30	39	31		2
Torpedoman's Mate	TMC	209	122	23	29	19	22	12	20	57	9	20	27	17	16	7	
	TM1	465	259	21	44	15	39	13	23	63	4	27	18	24	20	5	
	TM2	519	317	30	53	29	32	5	20	50	3	7	37	10	18	2	1
	TM3/SN	752	406	38	84	17	29	7	10	30	1		17	6	18	4	
Gunner's Mate	GMC	372	347	28	51	18	22	18	31	43	15	121	105	22	13	26	2
	GM1	655	561	24	53	16	27	28	53	48	28	114	80	35	13	23	1
	GM2	875	744	31	56	21	15	20	57	59	6	28	124	29	17	18	2
	GM3/SN	1329	1185	36	51	6	10	16	44	31	15	4	58	23	11	11	1
Fire Control Technician	FTC	352	267	21	12	3	6	6	122	12	2	74	54	9	1	9	1
	FT1	623	376	10	9	11	11	8	140	27	22	81	58	12	3	6	6
	FT2	762	578	2	5	2	11	15	44	25	15	6	40	8	4	1	4
	FT3/SN	1435	1018		2		7	6	2	10	18		22	1	3		5
Gunner's Mate Technician	GMTC	40	38	1	18	2	1		14	33	18		7	5	2		2
	GMT1	54	69	4	33	4	3		32	53	39		4	7	4		1
	GMT2	87	89	6	39	2	1		30	33	16		6	8	4		
	GMT3/SN	219	206	12	69	4	2		82	48	11		9	11	9		
Missile Technician	MTC	71	35	3	8			1	44	12	8	2	22	3		3	
	MT1	107	44		12	1			75	23	8	2	30	3			
	MT2	141	53		18				23	20	11	3	36	9			
	MT3/SN	365	88		19				18	20	16	4	31	12			
Mineman	MNC	6	3	6	26	3	3		5	16			3	1	3	5	
	MN1	10	4	4	36	2	2		9	23			4	10	3	4	
	MN2	13	6	7	53	4	3		17	20			5	5	4	4	
	MN3/SN	17	5	10	82	6	3		15	24			12	4	4	5	
Electronics Technician	ETC	451	272	85	123	27	39	10	116	90	29	159	67	173	23	53	4
	ET1	934	586	119	179	36	50	15	185	134	46	155	95	194	49	64	3
	ET2	1240	876	180	212	37	29	22	89	147	46	16	110	103	37	58	4
	ET3/SN	2177	1476	201	243	41	18	14	80	172	40	2	109	66	33	46	3
Instrumentman	IMC	18	14		2		2	1	1	3	1	6	2	1			
	IM1	22	19	4	4	1	2		3	2		4	1	3	1		
	IM2	35	28	2	4		1		1	3			8	3	1		
	IM3/SN	46	26	1	4		1						6	1	1		
Opticalman	OMC	24	12		2		4					10	2	1	1		
	OM1	28	16		4	1	4		1	1		7	1			1	
	OM2	46	28	1	4		6					9	2				
	OM3/SN	53	38		6		6		1				5		3		

Ashore & Afloat According to Your Rate

Note that the number of billets at each location represent the total number for that area and some or all of them may be already filled by personnel who are just beginning their tours there. The waiting periods for a particular rating in a specific area will, of course, depend on when these billets will be vacated by personnel now filling them under the rotation program.

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Shore Billets (includes District and Fleet Shore Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).											
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC	SRNC
Radioman	RMC	543	429	192	260	36	16	23	165	80	58	39	172	72	17	120	1
	RM1	883	714	264	392	40	19	25	188	88	31	21	180	83	34	150	3
	RM2	1264	1027	418	602	50	26	38	198	114	29	34	147	109	49	169	
	RM3/SN	2705	2415	638	1108	74	29	33	329	205	56	20	231	199	62	222	
Yeoman	YNC	417	324	154	145	43	53	36	162	78	64	97	122	65	18	227	2
	YN1	516	422	246	342	70	85	86	220	201	81	76	215	127	39	300	3
	YN2	548	512	243	385	98	132	79	317	249	135	214	393	136	51	268	1
	YN3/SN	894	671	253	474	148	136	111	434	288	86	162	396	187	58	226	4
Personnelman	PNC	46	40	31	53	21	21	25	123	65	20	62	116	35	14	48	1
	PN1	258	216	58	80	29	24	32	109	94	37	87	147	56	14	46	3
	PN2	274	220	47	94	35	42	49	144	136	40	91	183	66	24	52	5
	PN3/SN	346	361	73	131	50	31	35	180	154	38	80	248	88	20	49	8
Storekeeper	SKC	364	311	123	171	42	30	38	74	78	24	49	71	46	16	26	2
	SK1	591	507	124	209	41	44	37	90	106	34	47	109	52	20	43	3
	SK2	833	731	157	246	65	52	49	105	156	37	79	127	68	20	49	
	SK3/SN	1000	894	207	292	45	39	37	112	121	32	46	137	70	18	63	8
Disbursing Clerk	DKC	43	35	30	30	9	7	11	23	25	10	12	16	9	6	10	1
	DK1	117	98	39	63	16	10	9	33	34	7	4	29	14	8	9	
	DK2	287	263	24	35	8	7	9	23	43	7	8	36	18	4	15	2
	DK3/SN	160	110	39	66	21	14	10	37	45	15	6	56	23	3	12	2
Commissaryman	CSC	358	309	55	99	41	8	11	51	79	12	20	80	38	10	16	3
	CS1	754	666	97	138	46	15	25	82	103	19	84	151	67	17	45	8
	CS2	908	867	135	187	53	23	27	127	157	39	122	214	93	21	65	8
	CS3/SN	1190	1040	194	274	73	28	34	159	194	32	150	311	111	33	71	9
Ship's Serviceman	SHC	63	52	36	67	18	5	8	20	36	13	9	26	19	8	7	4
	SH1	390	324	42	51	22	8	15	41	54	12	42	72	39	9	18	4
	SH2	556	485	40	57	21	7	12	44	58	9	4	47	51	13	11	2
	SH3/SN	909	739	47	58	19	8	9	37	42	10	8	56	43	8	7	2
Journalist	JOC	7	8	12	14	7	3	1	10	9	2	11	9	5	1	11	
	JO1	14	13	9	23	4	4	3	7	11	5	11	12	5	2	8	1
	JO2	23	23	10	22	1	6	3	10	12	2	8	14	5	1	6	2
	JO3/SN	17	7	12	26	4	1	1	17	17	5	9	13	2	3	5	1
Postal Clerk	PCC	1	1	12	14		1		3	2		2	1	1		2	
	PC1	20	25	18	24	2	2		8	7	1	1	4	3	1	1	
	PC2	47	49	28	50	4	4	1	8	14	5	2	10	5	2	2	
	PC3/SN	223	244	36	65	2	2	3	15	14	3	4	7	4	4	2	
Lithographer	LIC	20	9	4	2	2			5			4	2	3		5	
	LI1	41	35	10	4	3	1		8	2	1		6	4		1	
	LI2	28	30	7	11	1	2	1	15				1	3		8	
	LI3/SN	56	45	10	14		2		20			1	3	5		12	
Illustrator Draftsman	DMC	1		2	6	1	1		4	2	2	1	10	1	1	5	
	DM1	14	11	12	14	2	7		18	10	1	6	17	4	1	23	
	DM2	21	11	10	24	3	4	2	20	15	3	7	20	10	1	17	
	DM3/SN	16	14	15	20		1	2	23	22	5	5	27	6	1	14	
Machinist's Mate	MMC	946	812	24	35	32	53	53	111	106	39	152	184	58	35	11	4
	MM1	1886	1499	21	41	34	81	51	94	215	70	145	158	67	63	33	2
	MM2	2325	1897	26	30	38	49	34	106	160	38	58	107	60	20	23	4
	MM3/FN	3275	2635	23	27	21	29	20	92	88	34	7	78	77	18	34	2
Engineman	ENC	517	439	26	69	20	48	41	47	69	44	110	51	32	27	25	5
	EN1	941	802	62	143	32	63	30	61	107	27	93	125	76	48	25	22
	EN2	1224	1031	54	137	25	31	20	65	75	25	11	89	44	38	19	10
	EN3/FN	1649	1382	57	213	24	28	7	49	64	3		101	33	28	43	15
Machinery Repairman	MRC	69	46	9	11	2	5	5	11	9	3	18	24	11	6	10	1
	MR1	198	147	8	22	5	17	6	13	22	3	12	29	9	5	1	2
	MR2	425	265	10	25	4	16	8	27	29	4	23	24	15	6	1	
	MR3/FN	406	323	6	17	2	8	4	8	20		1	18	14	6	2	

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Shore Billets (includes District and Fleet Shore Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).											
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC	SRNC
Boilermaker	BRC	34	37		1	1		10		2	3	12	17	1	1	2	
	BR1	198	155	1		5	15	9	13	18	9	33	2	3	1	3	
Boilerman	BTC	546	484	17	13	37	19	30	40	55	34	65	107	26	24	4	7
	BT1	837	751	8	6	39	26	34	36	86	40	95	65	30	30	15	3
	BT2	1571	1362	9	8	40	17	21	38	98	16	27	51	71	18	23	3
	BT3/FN	2373	2020	6	10	25	14	3	29	42	12		20	26	9	21	9
Electrician's Mate	EMC	745	552	16	33	23	48	28	33	77	14	114	110	50	35	18	3
	EM1	980	797	19	65	20	66	32	45	63	17	86	99	49	50	17	3
	EM2	1573	1261	34	122	23	40	23	60	73	13	32	98	52	30	19	9
	EM3/FN	2465	1981	21	110	8	25	34	41	57	3	9	65	61	32	23	6
I. C. Electrician	ICC	126	98	2	5	1	15	7	13	6	4	51	32	5	8	2	1
	IC1	518	402	4	11	2	24	13	17	25	3	59	47	20	18	4	1
	IC2	546	417	3	14	11	16	10	18	13	5	14	30	22	12	9	1
	IC3/FN	1088	836	10	7	7	14	13	19	27	6	2	20	22	8	5	2
Shipfitter	SFC	297	239	6	31	4	21	16	25	36	12	37	85	8	9	11	2
	SF1	709	544	11	51	14	42	31	37	58	11	72	78	33	11	11	3
	SF2	1112	822	11	60	6	59	22	28	28	5	22	53	32	17	12	4
	SF3/FN	1264	1027	12	54	4	43	15	27	18	6		62	28	16	4	3
Damage Controlman	DCC	85	89	22	39	11	6	22	17	20	2	7	24	39	5	11	4
	DC1	287	258	17	55	8	7	15	19	25	4	9	31	27	6	8	8
	DC2	487	428	19	61	7	4	10	23	22	3	14	29	21	8	8	9
	DC3/FN	425	346	18	41	1		12	13	18			28	18	1	9	7
Patternmaker	PMC	3	8		1				1			1	3			1	
	PM1	19	9					3				4	2	1		2	
	PM2	19	12							3			2	2			
	PM3/FN	19	15										2				
Molder	MLC	16	12							2	1	8	3	1			
	ML1	19	14		1				4			4	2				
	ML2	25	14	2					5				3	5			
	ML3/FN	37	24	1		2				1			6	1			1
Construction Electrician	CEC	13	23	16	18	5	1		3	2	4	12	11	4	3	13	
	CE1	50	28	24	31	7	1	1	6	4	2	11	17	4		6	
	CE2	55	60	38	39	9			2	7	2	1	12	4	2	10	
	CE3/CN	61	84	56	44	1			5	8	1		11	3			
Equipment Operator	EOC	33	62	12	26	3	1		4	16	5	2	25	4	4	5	
	EO1	62	95	23	42	10			8	29	15		33	9	1	3	
	EO2	83	107	35	54	6		1	13	78	19	1	37	15	2	5	
	EO3/CN	116	121	78	71	7		2	14	89	26	41	26			16	
Engineering Aid	EAC	9	7		4	2			1	1		3	6	1		3	
	EA1	9	12	5	7				1	4	2		4	1		1	
	EA2	15	11	3	4				1	3	3		3	2		2	
	EA3/CN	14	24	3	4	1			1	2	3		5	2			
Construction Mechanic	CMC	24	27	14	28	4			1	4	1	8	15	1		2	
	CM1	55	40	28	39	6		1	7	8	3		28	6	2	2	
	CM2	48	54	36	42	7		3	4	13	8		29	4	1	1	
	CM3/CN	99	83	52	51	6			1	15	3		35	8	2	1	
Builder	BUC	37	65	19	32	13	1	2	9	3	9	26	28	11	2	2	
	BU1	78	114	23	31	10	2	5	16	8	9	17	30	15	3	3	
	BU2	116	152	32	39	5		1	9	7	3	6	24	8	1	1	
	BU3/CN	179	249	40	41	2			9	12	3		28	3		2	
Steelworker	SWC	10	26	5	3	1		3	2	4		5	8	1			
	SW1	33	42	7	10	5				4	1	4	13	1	1	1	
	SW2	34	65	9	7	2		2	1	3	1	1	13	5			
	SW3/CN	62	79	13	14	2			1	2			17	1			
Utilities Man	UTC	12	21	18	21	6		3	4	9	1	6	15	9	2	8	
	UT1	35	31	32	41	5		3	4	9	1	1	8	4		3	
	UT2	42	55	51	31	3		2	2	13	3		7	4	2	5	
	UT3/CN	53	70	50	41	1		1	3	9	3		7	5	2	12	
Aviation Machinist's Mate	ADC	399	416	178	207	31	4	26	57	422	137	14	200	139	36	87	
	AD1	649	673	220	257	44	9	45	73	629	256	16	340	202	42	115	
	AD2	995	1043	296	354	57	5	51	68	557	258	9	457	343	61	144	
	AD3/AN	2315	2175	659	644	120	4	83	111	770	487	34	759	520	76	214	

		Total Sea Billets		Total Overseas Billets		Total Continental U. S. Share Billets (includes District and Fleet Shore Duty, Instructor and Recruiting Duty, and BuPers Controlled Billets).											
	RATE	LANT	PAC	LANT	PAC	1ND	3ND	4ND	5ND	6ND	8ND	9ND	11ND	12ND	13ND	PRNC	SRNC
Aviation Electronics Technician	ATC	339	292	107	95	8	2	8	20	302	28	9	126	42	17	36	
	AT1	572	543	183	180	19	5	25	43	408	84	6	210	77	28	43	
	AT2	902	882	261	245	37	6	28	46	283	99	2	280	117	28	63	
	AT3/AN	1874	2059	606	463	57	10	40	67	307	183	4	486	199	44	124	
Aviation Ordnanceman	AOC	160	154	30	32	3		2	13	77	20	2	62	29	12	11	
	AO1	246	240	32	43	9		6	12	83	33	6	112	53	12	19	
	AO2	461	438	45	68	23		5	15	44	39	1	144	72	14	20	
	AO3/AN	1192	1167	104	116	35		10	30	89	60		246	129	19	26	
Aviation Fire Control Tech.	AQC	62	60	2	7	1	1	3	5	79	1	3	33	15	13	4	
	AQ1	119	109	7	12				9	89	5		74	10	16	5	
	AQ2	150	153	8	17				7	53	11		106	18	22	8	
	AQ3/AN	355	356	12	20				26	14	28		178	18	37	6	
Aviation Boatswain's Mate	ABC	91	97	33	25	2	1	39	17	36	15	9	22	17	2	13	
	AB1	205	187	46	38	3		54	15	72	20	6	41	36	8	26	
	AB2	269	272	62	51	8		34	20	66			62	47	9	32	
	AB3/AN	411	459	112	61	12		42	30	98	30	3	59	70	8	37	
Aviation Electrician's Mate	AEC	162	150	47	44	3	1	4	11	180	32	2	61	35	13	14	
	AE1	288	266	84	79	14	1	14	25	272	80	4	143	73	16	26	
	AE2	451	412	119	116	21	4	16	25	158	104	2	212	116	22	47	
	AE3/AN	1032	1012	236	228	38	2	20	36	274	181	1	349	213	36	100	
Aviation Structural Mechanic	AMC	271	253	82	86	10	2	10	19	241	81	10	107	62	17	21	
	AM1	461	410	133	152	22	1	19	33	384	190	7	216	111	28	44	
	AM2	720	700	181	241	30	1	28	30	323	250	2	346	203	44	69	
	AM3/AN	1691	1620	386	440	53	3	34	72	635	453	3	594	345	56	119	
Parachute Rigger	PRC	14	7	12	12	2		12	7	27	13	1	18	14	6	8	
	PR1	112	103	19	21	5		39	7	37	19	1	38	14	6	6	
	PR2	130	121	20	21	6		9	8	47	24	1	49	23	11	8	
	PR3/AN	186	168	40	37	10	1	8	13	54	38		75	37	12	13	
Aerographer's Mate	AG1	72	60	44	60	2		23	8	31	12	1	23	15	2	14	
	AG2	84	56	64	83	4		6	16	41	15	1	37	25	4	21	
	AG3/AN	86	88	107	124	5		17	25	54	16	1	43	36	7	26	
Aviation Storekeeper	AKC	43	40	36	42	7		11	15	49	24	1	38	23	6	10	
	AK1	124	113	59	61	10	1	10	22	71	33	1	66	46	6	16	
	AK2	97	97	84	91	18		17	36	112	46	1	100	68	18	24	
	AK3/AN	180	166	100	102	15	1	22	51	124	47		109	94	16	32	
Photographer's Mate	PHC	56	35	11	31	4		5	9	42	4	3	19	4	1	8	
	PH1	122	94	16	52	4	2	6	14	54	9	4	38	10	2	81	1
	PH2	185	137	37	78	3	1	9	15	44	12	4	57	14	1	103	1
	PH3/AN	150	119	31	102	8	3	7	21	55	14	5	78	24	1	183	2
Photographic Intelligenceman	PTC	12	5	4	5					1		1		1	1	13	
	PT1	19	24	6	16					2				1	1	13	
	PT2	14	19	8	11									1		12	
	PT3/AN	48	32	4	15								2	1		21	
Hospital Corpsman	HMC	554	524	71	140	83	113	101	163	153	74	180	224	117	39	211	13
	HM1	505	604	91	205	80	89	90	179	261	66	159	305	172	35	259	14
	HM2	446	602	113	214	139	84	98	234	297	64	130	351	184	44	215	23
	HM3/HN	1024	1568	231	535	556	333	399	855	1097	160	494	1279	547	138	592	83
Dental Technician	DTC	33	30	9	20	8	5	5	19	20	3	12	35	11	1	27	2
	DT1	65	63	22	41	12	5	6	23	41	10	14	51	23	4	31	3
	DT2	90	108	22	39	15	6	10	33	44	9	20	72	27	6	34	6
	DT3/DN	150	154	47	81	56	20	22	118	159	47	146	502	156	31	120	36
Steward	SDC	145	132	24	43	11	9	10	30	41	13	7	29	19	4	49	12
	SD1	486	405	35	65	16	11	16	40	70	24	13	53	34	8	42	16
	SD2	650	582	47	82	24	13	16	66	111	30	18	65	37	10	35	19
	SD3/TN	3619	3186	207	351	119	73	46	248	558	136	87	261	164	38	377	91

The Navy's manpower requirements vary from day to day — and billet to billet. It is often necessary to change billet requirements in order to improve stability. This was considered while figuring the billets in this table for each rate in each area. It is probable that, by the time you read this, some of the areas will have more — or less — billets than are indicated. These numbers are close, however, and should give you a good idea of where in the world you are needed. A word to the wise — the wider the latitude you give in your choice of duty, the better your chances of getting there. Once again, remember the suggestions made in this report.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept. Washington 25, D. C.

The Red or the Gold?

SIR: I would like a little clarification concerning service stripes.

Assume a man had active duty in the U. S. Navy from 4 Jan 1944 to 3 Jan 46; inactive duty in the Naval Reserve from 4 Jan 1946 to 3 Jan '50 and active duty from 4 Jan 1950 to the present date.

Should he wear four red service stripes because he had served more than 16 years or can he wear four gold stripes on the basis of his 12 years of continuous active duty from 4 Jan 50. His conduct marks are satisfactory. — M. V. M., YNC, USN.

- *You've struck gold, Chief, and the answer is four gold stripes. The regulations say gold lace may be worn by enlisted personnel who have had 12 years of continuous* active *duty (full-time duty) in the Navy or Naval Reserve. He must also, of course, be eligible to receive the Navy Good Conduct Medal.*

One gold service stripe is worn for each four years of service. — ED.

Inter-Fleet Transfer

SIR: At the end of my tour in WESTPAC, I would like to apply for sea duty in any ship operating from the East Coast, preferably from the Fourth or Fifth Naval District.

This, of course, is an inter-fleet transfer, and it is necessary to have four years on one coast before being eligible for such a transfer.

I have been on the West Coast only since July 1959. However, if I extend my enlistment until 18 Mar 1964, instead of requesting transfer to the Fleet Reserve in January 1963, as I have a right to do, I will have completed the four-year requirement.

The first of next year I will have completed my 19-and-six, so I am not writing about a 30-year twilight cruise.

Since the cost to the government would be the same if I were transferred to the Fleet Reserve (my home of record is in Pennsylvania) or given the inter-Fleet transfer I desire, it seems to me I stand a pretty good chance.

What is your opinion? — A. D. C., SF1, USN.

- *We hate to throw cold water but, in our opinion, your chances are not so hot.*

Your logic is admirable, and we assume the quality of your service at least equals its length.

However — as you know, the Navy is big. Although your line of thought is completely orderly, if the Navy permitted unplanned moves among the numerous men whose circumstances are similar to yours, quite a game of musical chairs — Oops, ships — would result.

For this reason, the privilege which you seek is reserved for 30-year men in order to preserve the stability of the Fleet. — ED.

About That Reenlistment Bonus

SIR: I have read Art. A-4204 of the *BuPers Manual*, but don't quite understand some of its provisions. Say, for example, that a Navyman reenlists for six years. Sometime during his first three years of service after he ships over he applies for OCS and is accepted. After completion of training he is commissioned ensign in the Naval Reserve. Will the man then be required to repay a portion of his reenlistment bonus covering time not served as an enlisted man? — J.H., PN2, USN.

- *No, he keeps his entire bonus. There is no requirement for recovery of reenlistment bonus from an enlisted man who accepts a warrant or commission. Para. 044070-4b of the "Navy Comptroller's Manual" also applies.* — ED.

Inactive, But Busy

SIR: Regarding your article concerning USS *Griffin* (AS 13), which appears in the December issue of ALL HANDS, we of Stockton Group, Pacific Reserve Fleet, would like to offer additional information concerning the later history of that ship.

Upon decommissioning in October 1946, *Griffin* was placed in reserve status at Mare Island, Calif., with Sub Group One, Mare Island Group, PACRESFLT. In July 1959, *Griffin*, after having been towed to Stockton, Calif., began operation as the accommodation ship for Stockton Group, Pacific Reserve Fleet. *Griffin* was placed In Service. In Reserve and partially activated.

All berthing and messing spaces, repair shops and related facilities, office spaces and equipage, commissary facilities, ventilation, refrigeration and allied systems, as well as the electrical power generation and allied distribution systems were put in good working order.

On 15 Feb 1961, installation of electrical shore power was completed and the ship commenced receiving its electrical power requirements from the pier.

Griffin now provides the berthing messing and related necessary services for the operation of Stockton Group. Her shops are employed in preventive maintenance for the other Reserve Fleet ships berthed with this group — R. M. Wilson, CAPT, USN, Commander, Stockton Group, PACRESFLT.

- *As we always say, you can't keep a good ship down.* — ED.

High Reenlistment Rate

SIR: Squadron VS-35 located at NAS North Island, San Diego, is proud of its reenlistment record..

Since it was commissioned in January 1961, the squadron of 150 men has had a reenlistment rate of 80 per cent for career men and 48 per cent for first termers. The over-all rate is 60 per cent.

And among those who did not reenlist, five went into the Fleet Reserve.— A. A. T., LTJG, USN.

- *Congratulations. Your squadron's reenlistment rate speaks eloquently of its morale.*

We think it is indeed a matter for justifiable pride.—ED.

Eligibility for Submarines

SIR: I have known of instances in which men transferred directly from ship to submarine without first attending submarine school.

Is this still possible? If so, how do you go about it? I am an MM2, with 12 months of obligated service, who would like to transfer to submarines. — R. W. C., MM2, USN.

- *Until December 1960, if a man were eligible for submarine training and in an engineer rating, he could be ordered directly to a submarine on an intra-Fleet transfer without first going to submarine school.*

After that date, however, such transfers were discontinued. Engineering personnel must now comply with the requirements of Chapters 10 and 11 of the "Enlisted Transfer Manual." — ED.

When Is a Ship a Unit?

SIR: It seems to me the practice of calling a ship a "unit" has gotten completely out of hand. What's wrong with referring to a ship as a "ship"?

I believe a unit in the Navy is a group of type craft, such as a submarine division or fighter squadron, or, in special cases, a ship which operates independently.

More and more these days, news releases and Navy letters refer to ships — any ships — as units. For example, "Two destroyers entered the Black Sea. They are units of the Sixth Fleet." Or "Units of this air squadron will be inspected. . . ."

Here's another point: Seniors in administrative command organizations are considered unit commanders. If an administrative commander calls for a meeting of unit commanders, I feel sure he would expect a submarine flotilla commander, destroyer squadron commander, amphibious group commander, etc., to attend. I don't think the commanding officers of all the ships within these units would be included in the invitation. — H.W.D., CDR, USN.

• *You state your case well, Commander, and we agree with you in your interpretation of the term "unit commander." By usage, this would not include the commanding officer of a ship, unless, of course, he is also the commander of a division, squadron, etc., in some type organization.*

But in referring to a ship as a unit, we believe it is permissible: (1) When the ship is considered a unit for maneuvering purposes; and (2) when the ship is described as part of an over-all organization. The Dictionary of U. S. Military Terms for Joint Usage, *which contains definitions approved (by the Joint Chiefs of Staff) for use by all the services, backs us up. Therefore, the DDs you mention are, indeed, "units of the Sixth Fleet" and the aircraft "units of this squadron."*

ALL HANDS *writers occasionally use unit in this sense to avoid repetition of the word ship.* — ED.

CHIEFS ALL — Leslie W. Carter, CSC, USN, of *USS Pledge* (MSO 492) chats with CPOs of the British and Thai navies at Satahip, Thailand.

Retake on Basic Battery Tests

SIR: I recently reenlisted after broken service of some six months, and was ordered to RECSTA San Francisco, for outfitting and classification. While there, I was required to retake all of my Basic Battery Tests. I did so very much against my will, as I didn't want my original GCT score changed. I had been told at the recruiting station, when I reenlisted, that I would not be required to retake these tests.

My original test scores were: GCT - 66; ARI - 49; MECH - 65; CLER - 36. On the retake, I made: GCT - 61; ARI - 57; MECH - 62; CLER - 51.

Since retakes usually require everything but an act of Congress, why was I required to do so? Is there any way I can be allowed to retain my original scores? — J. D., BT1, USN.

• *Let's answer your questions one at a time.*

BuPers Inst. 1220.17 says Regular Navy enlisted personnel, reenlisting with broken service of three months or more who report to Naval Receiving Stations without an enlisted classification record page (page three of the service record), will be tested with the Navy Basic Test Battery, and a page three prepared. You were administered the Basic Test Battery in accordance with this instruction.

Here's why. In the past, many broken-service reenlistees reported in to RECSTAS *without a page three in their service records. In each such case correspondence had to be initiated to the Bureau requesting a certified copy of the individual's enlisted classification record page. Not only did this delay the issuance of an availability for assignment report on these men, but, in many such instances, men remained in a transient status much too long while awaiting records from the Bureau. BuPers Inst. 1220.17 was issued to cut down this delay.*

As for your second question — it appears you are placing too much emphasis on your GCT score alone, and are not giving due consideration to your over-all test battery.

While it is true that you lowered your GCT five points and your MECH score three points, you raised your ARI eight points, and your CLER 15 points. Thus your present test score profile forms a more normal pattern than your earlier one.

Your present combination of GCT and ARI equals 118, as opposed to your original GCT/ARI total of 115. Incidentally, this combination now meets the cutting score for the NESEP program, whereas you were three points short before. You also meet cutting scores for surface and submarine nuclear power programs, integration, recruiting duty, instructor duty and other programs.

Contact your I & E officer, and check the many opportunities available to enlisted personnel in today's Navy. You will probably find your present scores are more of an asset to you than your previous ones. — ED.

FROGMAN John Swider, SF1, USN, of UDT-11, points to tools used by underwater demolition teams.

March or Anthem

SIR: In your "Way Back When" feature in the January issue, you state that "the band struck up the National Anthem," in reference to the arrival of General MacArthur at the Japanese surrender ceremony aboard USS *Missouri* (BB 63).

The training manual, *Signalman 3 & 2* (NavPers 10135-A) states that a General of the Army receives only the "General's March." Who is right? — P.W.D., SN, USN.

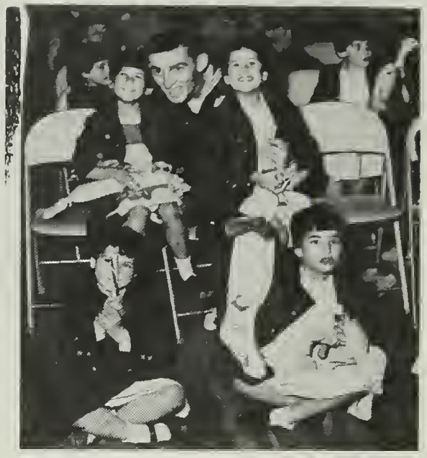
- *They're both correct.*

A General of the Army, under normal circumstances, should receive the "General's March," as indicated in your manual, and not the National Anthem. In this situation, however, General MacArthur was representing the President of the United States, and was rightly greeted with the National Anthem.

The National Anthem is played for any diplomatic representative whose credentials give authority equal to or greater than that of an ambassador. In this case, as the President's representative, with the authority to sign an instrument ending a war, General MacArthur rated the National Anthem. — ED.

Reenlistment Travel Pay

SIR: Here's a situation I would like clarified. I am now serving in Germany, and am scheduled to reenlist shortly. I last enlisted in 1956 while I was stationed outside CONUS (at Pearl Harbor). Now I figure that I am entitled to receive travel allowance from New York City (nearest port of entry from Germany) to San Francisco (port of embarkation to Hawaii), since Hawaii was the place of my last or current enlistment, and I am allowed by regulations to specify either home of record or place of last enlistment.



ORPHANS and James D. Williams, PC2, USN, smile for photographer during party at the U. S. Naval Magazine gym, Cartagena, Spain.

The personnel office at my current duty station, however, maintains that if I choose place of last enlistment, I will receive no travel allowance whatsoever, since "government transportation is available outside the U. S." They say I must, or should, elect travel to my home of record. In my case, that would be from New York City (port of entry) to my home in Connecticut — a distance of about 50 miles. I'm hoping they're wrong — H.G.B., JOCS, USN.

- *Sorry Chief. According to the Navy Comptroller's Office, you're out of luck. Here's what that organization has to say on the subject.*

"Joint Travel Regulations, Chapter 4159, Sub-Paragraph Five, Part d (From one place outside the United States to another place outside the United States) applies." It says:

"When both the member's last duty station and the place to which he elects to receive travel allowances are located outside the United States and transoceanic travel is involved, mileage is payable for the official distance:

"Between the member's last duty station and the nearest aerial or water port of embarkation serving that station, and

"Between the place to which the member elects to receive travel allowance and the nearest port of aerial or water debarkation serving that place.

"No mileage allowances are payable under this sub-paragraph for any land travel between the port of embarkation serving the point of origin and the port of debarkation serving the destination. When no transoceanic travel is involved, mileage is payable for the official distance of the land travel involved." (For this purpose Hawaii is considered to be outside CONUS.)

Still confused? We don't blame you — we were too. Fortunately, however, the June 1958 issue of the "Disbursing Digest" (NavExos P-1458), the monthly publication of the Comptroller of the Navy, contains a comparatively clear interpretation of the above regulations.

Under the heading Mileage Allowances on Separation Overseas it says:

"What entitlement to mileage allowance exists when Sam Sailor is discharged at an overseas station? That question seems to be perplexing many personnel and disbursing offices, especially when the place Sam last enlisted was also outside the United States.

"'Joint Travel Regulations' provide that a member, on discharge, may elect to receive a mileage allowance from the place at which he is separated to either his home of record or to the place from which he was ordered to active duty (the definition of which also includes the place of acceptance on his current enlistment). Actual performance of the travel is not required. Paragraph 4159-5 of these regulations lists the various circumstances that could occur, and discusses the entitlement connected with each. There is apparently little difficulty when at least one 'end' of the mileage Sam elects is in the United States, but when both ends are outside, all sorts of problems seem to arise.

"Actually, careful attention to subparagraph 5d of the above-mentioned paragraph should eliminate all the confusion. When there would be transoceanic travel, then the mileage payable is limited to that from Sam's last station to the nearest port (air or water) from which transportation could be furnished to the country in which the place of election is located, plus mileage from the port at which Sam would arrive in that country to the place of

UNDERWAY — USS *Macdonough* (DLG 8) is armed with *Terrier* missiles, torpedoes, and ASW and other conventional destroyer-type weapons.

election. But, and this is very important, no mileage is payable for any land travel that might occur between the port near Sam's last station and the port near his place of election (i.e., across the U. S.)."

Applying this to your own case, it would appear that it would be more advantageous for you to elect your home of record. If you do so, you will receive mileage from your present duty station in Germany to the nearest air or water port serving that station, and mileage from New York City to your home in Connecticut. If you were to elect Hawaii, you would receive mileage allowance only from your present duty station to the nearest air or water port serving that station, since there would be no travel involved at the Hawaiian end. — ED.

Rapid Advancement

SIR: In the December 1961 ALL HANDS letters section you imply it is not possible for a man to advance from E-1 to E-6 during a four-year enlistment. You say it takes a minimum of 52 months, or four years and four months.

I enlisted for four years on 16 Sep 1959. I was advanced to CT2 on 16 Nov 1961. I will be eligible to participate in the August 1963 exams for CT1, and, if successful, will be advanced on 16 Nov 1963, or four years and two months after enlisting — H.H., CT2, USN.

- *We stick by our statement that it's not possible to make PO1 on a four-year or minority enlistment. However, we'll back down on our implication that it takes a minimum of four years and four months.*

As part of the ALL HANDS *explanation, and for the information of readers who didn't see the December issue, here's the way the listing of "service in pay grade time requirements for advancement" came out:*

E-1 to E-2 — four months
E-2 to E-3 — six months
E-3 to E-4 — six months
E-4 to E-5 — 12 months
E-5 to E-6 — 24 months

Add these up and you see that it would take 52 months, or four years and four months, to satisfy the time requirements for advancement to PO1.

We goofed by a couple of months.

Normally, it doesn't take four months to advance to E-2. This is usually automatic upon completion of recruit training, which takes about two months. Therefore, we can deduct a couple of months from our December total and come up with the four years and two months it would conceivably take you to make first class, which would be broken down like this:

16 Sep 1959 — Enlisted
16 Nov 1959 — Advanced to E-2 after completion of boot camp
16 May 1960 — Advanced to E-3; six-month wait as E-2 satisfied
August 1960 — Took exam for E-4; passed
16 Nov 1960 — Advanced to E-4
August 1961 — Took exam for E-5; passed
16 Nov 1961 — Advanced to E-5

Looking ahead, you could take the E-6 exam in August 1963, and, if successful, be advanced to CT1 on 16 Nov 1963 — exactly four years and two months after you first enlisted. This is assuming that by then you will have shipped over or extended your enlistment, which otherwise would expire two months before you could be advanced.

As long as we're exchanging information on the subject of advancement, ALL HANDS *would like to make something clear. It is not this magazine's intent to cite any particular individual as "proof" of the Navy's advancement opportunities. This is not desired by readers who are smart enough to recognize, and wouldn't hesitate to shoot holes through, a hard-sell gimmick.*

Any advancement of an enlisted man in the Navy is based on an examination as well as time in service, time in rate, performance marks and medals and awards. Failing the exam means no advancement. Passing it means that advancement is possible, but only if quota limitations permit.

In view of this, let's be realistic. Quota limitations play a major part in the pace of advancement. In the case of this particular rating, quota limitations have been practically nonexistent. And the timing, either by chance or intention, couldn't have been better. These factors, coupled with an open rating and thorough exam preparations, have resulted in advancements as rapid as Navy procedure allows.

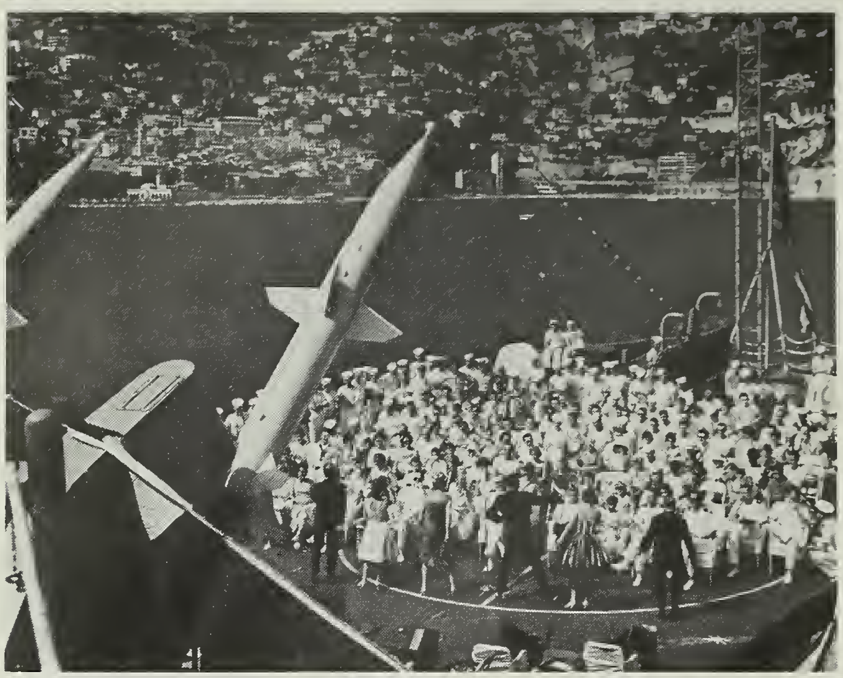
Chances for advancement in the CT rating have been excellent in the past, are excellent at present, and from all indications will continue to be excellent during the next few years. (To be more specific, 70 to 100 per cent of those who pass the CT3, CT2 and CT1 exams will be advanced. Chances for making CTC are only "good" — that is 40 to 70 per cent of those who pass will be advanced.)

ALL HANDS *thinking is that any Navyman who can solve the complicated questions presented in his advancement exam knows his stuff.*

Communications Technician H.H. appears to be the kind of a man the Navy is looking for. ALL HANDS *salutes him and wishes him success.* — ED.

BAR TIME—E. E. Phillips, SFC, USN, receives his commission as Ensign (LDO) during ceremony on board *USS Opportune* (ARS 41).

FOR DUTY — D. L. O'Shea, FN, USN, reports on board *USS Ticonderoga* (CVA 14) and has salute returned by C. R. Emmett, ADC.



SHOW TIME—USO troupe, *Broadway '61,* entertains *USS Springfield* (CLG 7) personnel and dependents off coast of Villefranche, France.

Submarine Chaser

SIR: I am a USNR officer relatively new to the Navy and still trying to solve the complexity of ships' designators. I do know, however, that a PCH is a Submarine Chaser (Hydrofoil), not a Patrol Craft (Hydrofoil) as you indicated in your February "Quiz Aweigh." I use *Basic Military Requirements* (NavPers 10054.A) as my reference.

I think you goofed, but then we all do sooner or later.—LTJG R. J. P. F., USNR.

• *We "old-timers" also find it difficult to keep abreast of new ship designators, and we did, as you say, goof.*

This should have been obvious to us. After all, any old salt knows that a PC is a Submarine Chaser (173'). It therefore follows that a PCH is a Submarine Chaser (Hydrofoil) and not a Patrol Craft (Hydrofoil).

A Patrol Craft, as any man with any time in the Navy will tell you, is a YP. Since the hydrofoil craft was not designated a YPH, we should have known right off that it was not a Patrol Craft (Hydrofoil) at all, but a Submarine Chaser (Hydrofoil).

We seem to have it straight now, thanks to you.—ED.

Apprenticeship Rate

SIR: Can you tell me whether or not TNs are considered to be steward strikers? After reading Art. C-7215 in the *BuPers Manual,* I am of the opinion they are, but there is considerable opinion on board to the contrary.

Can you set me straight?—J. L. H., PN2, USN.

• *TN is a general apprenticeship rate in the path of advancement to Steward, but it is not a striker identification.*

The "Manual of Qualification for Advancement in Rating" (NavPers 18068) covers this subject. — ED.

Mosque Museum

SIR: The Istanbul "mosque" you pictured on the inside back cover of your February issue is actually Turkey's Naval Museum. The building was built as a mosque, but it has not been used as one for many years.

For a visit to a real mosque, may I suggest Sultan Ahmet, commonly referred to as the "Blue Mosque." This is located in Istanbul on the other side of the Golden Horn. The Blue Mosque is noted for its six minarets (towers), from two of which muezzins (criers) chant the call to prayer each day.

However, any Navyman lucky enough to visit Istanbul should not fail to visit the museum; it is extremely interesting. It is located adjacent to the Fleet Landing — J. C. McCarthy, CAPT, USN.

• *A mosque, we've been informed, is an "Islamic place of public religious worship." Therefore, if a "place" isn't used by Mohammedans for public worship, it isn't a mosque.*

Thanks for bringing the error to our attention. And thanks for the liberty tips. — ED.

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Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results, will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Helena* (CL 50)—The fourth reunion will be held 4, 5 and 6 August at the Fontenelle Hotel, Omaha, Nebr. For further information, write to Joseph J. Cannone, 2450 South 19th St., Omaha, Nebr.
- USS *Nevada* (BB 36) — A reunion is scheduled for 27 October at the El Cortez Hotel, San Diego, Calif. For more details, write to M. E. Hicks, 8902 Polland Ave., San Diego 11, Calif.
- USS *Aaron Ward* (DM 34) — A reunion will be held 1, 2 and 3 July at the Town House Motor Hotel, Kansas City, Kans. For details, write to Charles B. Shea, 3303 Orion Ave., Cincinnati 13, Ohio.
- *VR-24, Det. I,* Naples Italy — A reunion is being held in Seattle, Wash., for those who served from 1955 to 1958, on 4, 5 and 6 July. For more information, write Ronald K. Reed, Box 184, Powers, Oregon.
- *Submarine Veterans of World War II* — The eighth annual reunion is scheduled for 8-12 August, at the Sheraton-Chicago Hotel, Chicago, Ill. For details, get in touch with Charles Cook, 7909 North Neva Ave., Niles 48, Ill.
- *Fifth Special Seabees* — The fifth reunion will be held at the Whitcomb Hotel, San Francisco, Calif., on 6, 7 and 8 July. For information, write to L. M. Kerrison, Box 607, Haynesville, La.
- *43rd Seabees* — A "20th anniversary reunion" is scheduled for 11 and 12 August at the Manger Hamilton Hotel, Washington, D. C. For more details, write to Thomas A. Gifford, 100 Ives St., Waterbury 4, Conn.
- *80th Seabees* — A reunion is scheduled for 1 September in Cleveland, Ohio. For information, write to Harold L. Fowler, 3086 Ashwood Rd., Cleveland 20, Ohio.
- *93rd Seabees* — The 13th annual reunion will be held at the Hotel Leland, Detroit, Mich., on 30-31 August and 1 September. For information, write to Harry Schaefer, 4684 McKinley, Dearborn 9, Mich.
- *Pearl Harbor Survivors Association* — A reunion is scheduled for 7 December at the Lafayette Hotel Long Beach, Calif. For more information, write to the Pearl Harbor Survivors Association, 7551 Trask Ave., Playa Del Ray, Calif.
- *Waves* — The 20th anniversary celebration will be held in Washington, D. C., on 26-29 July. For details, write to Waves Twentieth Convention, 1616 K St., N.W., Washington 6. D. C.
- USS *Briareus* (AR 12) — All former crew members who served from 1943 to 1947 who are interested in a reunion may write to D. J. Collins, 332 Kennedy Ave., Hempstead, Long Island, N. Y.
- USS *Pillsbury* (DER 133)—Those who served from 1 Jan 1957 until decommissioning who are interested in holding a reunion may write to Wayne Kingston, 43 Raymond St., Fall River, Mass.
- USS *Wasp* (CV 18) — A reunion is planned for the spring of 1963 for those who served on board between November 1943 and the end of World War II. For more information, write to CWO W. T. Northrop, NAVOCS, Bldg. 1805, Newport, R. I.
- *Boot Camp Company* 577—Those who "graduated" with Boot Camp Company 577, Great Lakes, Ill., in 1956 who are interested in holding a reunion may write to Charles E. Griggs, Box 252, Lehigh, Iowa.
- *Personnel Office, Submarine Base, New London, Conn.* — Those who served during 1957 and 1958 who are interested in holding a reunion may write to George B. Hoopes, Beacon Hill House, 317 S. Darlington, West Chester, Pa.

Haynsworth *Sails Suez, for Record*

SIR: I believe my ship, the destroyer, USS *Haynsworth* (DD 700), may have set some sort of record for U. S. Navy ships recently by transiting the Suez Canal both ways within 31 hours.

Haynsworth was scheduled to be relieved of Persian Gulf-Red Sea patrol duty by the destroyer *Soley* (DD 707). After relieving us, *Soley* was supposed to deliver some 47 tons of dried milk to flood victims in Mombasa, Kenya. The day before she was due to relieve us, however, *Soley* suffered a breakdown at Port Said.

We departed Port Suez, on the Red Sea end of the canal, early the following morning, transited the canal, and moored alongside *Soley* at 2130 that evening. After transferring approximately eight tons of stores and that 47 tons of dried milk from *Soley* to our ship in just over two hours, we joined a southbound convoy at midnight the same day, and arrived back in Port Suez at 1530 the next afternoon.

We weren't especially surprised by all of this. It has been quite a deployment. We have transited the Bosporus, passed through Suez four times, and crossed the equator — but we're still calling it a Med cruise.

Incidentally, if we have been beaten on the Suez double crossing time, it was probably by another destroyer. — E. R. C., QMC, USN.

- *We haven't the slightest idea whether you've set a record or not, but we're perfectly willing to run your claim up the flagpole to see how it flutters. We imagine you'll be hearing from the Fleet before too long.* — ED.

RESTING alongside pier is war-famed sub *Guardfish* (SS 217) which saw final service at sea as target in test firing of a new torpedo.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

PORT BOUND—Royal Netherlands Marine Honor Guard greets USS *Northampton* (CC 1) as she enters harbor at Willemstad, Curacao.

See You at the World's Fair

Thirteen ships of the U. S. First Fleet are participating in the 1962 Seattle World's Fair and Century 21 Exposition which opened at Seattle, Wash., 21 Apr 1962.

More than 3500 men are embarked in the 13 ships.

The ships include USS *Helena* (CA 75), the amphibious command ship *Estes* (AGC 12), the seaplane tender *Currituck* (AV 7), the guided missile frigate *Preble* (DLG 15), the submarine *Blackfin* (SS 322), three destroyers and five minesweepers.

The destroyers are *Wedderburn* (DD 684), *Parsons* (DD 949) and *Lynde McCormick* (DDG 8).

The minesweepers include *Constant* (MSO 427), *Advance* (MSO 510), *Pluck* (MSO 464), *Pivot* (MSO 463) and *Energy* (MSO 436), all of Mine Division 92.

All the ships are homebased in San Diego, Calif., with the exception of *Blackfin* and five minesweepers. *Blackfin* is homeported at Pearl Harbor, Hawaii, while the minesweepers operate from Long Beach, Calif.

General visiting by the public was conducted aboard all of the ships during their stay in Seattle.

YESTERDAY'S NAVY

On 4 May 1865 the commander of Confederate naval forces at Mobile Bay, Ala., surrendered. On 5 May 1864 Union Army forces were landed at City Point and Bermuda Hundred, Va., supported by ironclads and Fleet vessels. On 12 May 1846, the United States declared war on Mexico. On 16 May 1811 *USS President* exchanged several shots with *HBMS Little Belt* off Cape Henry. On 25 May 1862 Norfolk Navy Yard was recaptured by U. S. Marines. On 28 May 1798 the President instructed commanders of United States public armed vessels to make reprisals on the commerce of France.

New Atlantic Fleet Command

DESLANT and CRULANT, two famed type command names which meant "home base" for at least a couple of generations of Atlantic Fleet Navymen, are no more.

As of 1 April, DESLANT, based at Newport, R. I., and CRULANT, operating out of Norfolk, Va., were combined into a new command—Cruiser-Destroyer Force, Atlantic Fleet (CRUDESLANT) – with headquarters at Newport. Big news so far as the shipboard sailors of the two former commands are concerned, however, is that no changing of home ports of either cruisers or destroyers is involved in the reorganization.

At the top level the new command is similar in organization to the Long Beach, Calif.-based CRUDESPAC which established command of Pacific Fleet cruisers and destroyers under one flag back in 1949.

The new command has been set up because of the increasing similarity of many cruiser/destroyer type weapons, equipment and power plants, and a resulting similarity in problems and requirements related to reliability, maintenance, tactics and personal training.

RADM Robert H. Speck, USN, former COMDESLANT, has taken over as first COMCRUDESLANT. RADM Michael F. D. Flaherty, USN, who had been serving as COMCRULANT and Commander, Cruiser Division Six, continues as COMCRUDIV Six.

England Launched

The guided missile frigate scheduled to be commissioned as USS *England* (DLG 22) was launched in March at San Pedro, Calif.

The new *England* carries on the name of the World War II destroyer escort USS *England* (DE 635), which was awarded the Presidential Unit Citation for her outstanding antisubmarine warfare record in May 1944 against the Japanese. Working in coordination with other ships and aircraft, the World War II *England* was credited with "kills" on six enemy submarines in 12 days.

Both ships were named in honor of Ensign John C. England, USNR, who was killed on board the battleship USS *Oklahoma* (BB 37) during the attack on Pearl Harbor on 7 Dec 1941.

England is 533 feet long and has a displacement of 7000 tons. When she joins the Fleet she will carry twin *Terrier* missile launchers fore and aft. She will also carry *Asroc* plus conventional 3-inch/50-cal. guns and six torpedo tubes.

BIG SWITCH — *USS Oklahoma City* (CLG 5) moves alongside *USS Saint Paul* (CA 73) at Yokosuka to take over Seventh Fleet flagship duties.

Underwater Detective

Anyone in the 13th Naval District who looks over the side to see an air hose terminating in a trail of bubbles can be reasonably certain the bubbles are being made by a Keyport diver bossed by a Master Chief Torpedoman's Mate named Robert C. Sheats. Chief Sheats is a Master Diver at the U. S. Naval Torpedo Station, Keyport, Wash. He was named Outstanding Enlisted Man for the Puget Sound area for 1961.

Chief Sheats and his men are specialists in doing good jobs under rough conditions. Among other chores, they have investigated accidents, done detective work and performed the dolorous job of recovering victims from underwater wrecks.

On one occasion the Coast Guard asked Chief Sheats and the Keyport divers to assist in investigating the grounding of SS *Island Mail* near Smith Island in Puget Sound.

Chief Sheats and his men located the rock which *Island Mail* struck, photographed it and recovered several pieces of the ill-fated ship.

The evidence produced by the divers, together with Chief Sheats' testimony at the Coast Guard hearing, was of substantial benefit in determining the cause and the exact location of the grounding.

The FBI also has reason to be grateful to the Keyport divers, because of their role in the recovery of three stolen government weapons from the Columbia River slough in Portland, Ore. This evidence was instrumental in bringing the thief to trial and in his conviction.

Among the group's uncheerful but necessary assignments were the recovery of three victims in the wreckage of a light plane which crashed in the surf at Lapush, Wash. The divers also recovered parts of the wreckage, including the plane's engine, which had become almost completely buried under heavy gravel.

The divers also recovered the body of a pilot and parts of the wreckage of a Navy F9F8 jet fighter which crashed in about 150 feet of water at the end of Ault Field, Whidbey Island. The recovery of wreckage from these crashes helped to determine their causes.

One of the divers' most difficult jobs was an operation at Agate Pass near the Naval Torpedo Station at Keyport. A unit of experimental equipment was buried under some 18 feet of sand and gravel and about 60 feet of water.

To recover the unit, it was necessary to wash out a funnel-shaped hole about 20 feet wide. Visibility in the funnel was zero, and the divers worked in tidal currents that ranged up to four knots. They were also harassed by continual cave-in and sanding-in processes around the bottom of the funnel.

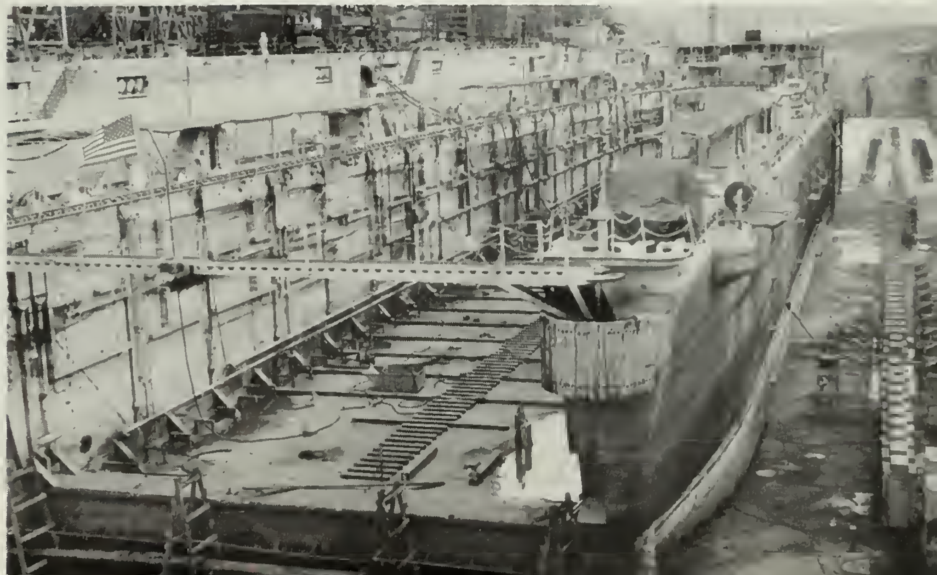
These are a few of the reasons why Chief Sheats was singled out from among Army, Navy and Air Force personnel in the greater Seattle area as an example of outstanding leadership and ability.

Drydock Drydocked

When a doctor gets sick, he consults another doctor. The same thing applies to a floating drydock. When it needs repairs, it goes to another drydock.

USS ARD-30, a specialist in minor repairs to submarine (average patient load – two per month), felt the need for overhaul. She was hospitalized at the Pearl Harbor Naval Shipyard in February.

DRYDOCK IN DRYDOCK—*USS ARD 30* gets overhaul at Pearl Harbor Naval Shipyard. The floating drydock was commissioned in 1945.



OLD-TIMERS—*USS R-5* (SS 85) of 1919 and *USS Argonaut* (SF 7) of 1928 had guns like others of their time.

Subs Sad, Guns Gone

Early this year, the United States government presented the submarine USS *Spot* (SS 413) to the government of Chile. The transfer of U. S. naval vessels to foreign governments is not unusual, but the passing of *Spot* from the Navy scene was something different. *Spot* was the last submarine in the United States Fleet to have a mounted deck gun.

The era of submarine deck guns began about 1914, when L boats carried 3-inch/23-caliber guns. This type gun was the mainstay of submarine deck armament until 1919 when USS *R 21* (SS 98), which carried a 3-inch/50, was commissioned.

Soon after World War I, USS *S-1* (SS 105) went into commission with a 4-inch/50 on her deck. Other subs followed, carrying weapons which approached the size of surface guns.

For instance, in 1924, USS *Barracuda* (SS 163) carried a 5-inch/51 and, in 1928, USS *Argonaut* (SM 1) was armed with two 6-inch/53s and two .30 caliber machine guns. The Navy found all this armament to be unsuitable for the type and mission of the craft and pulled back to one 4-inch/50-caliber gun and four .30 caliber machine guns as secondary armament.

Deck armament remained reasonably stable during the thirties, when the 3-inch/50 was considered the most efficient. However, when World War II broke out, a group of subs, beginning with USS *Balao* (SS 285), were armed with 4-inch/50 caliber guns.

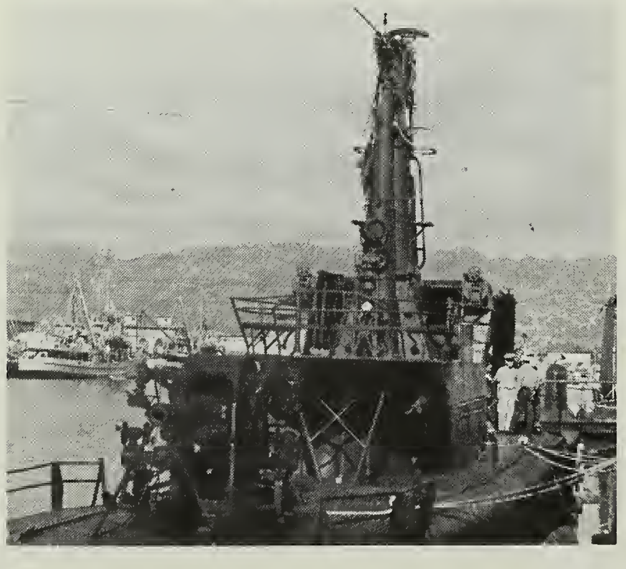
In oriental waters, wartime submariners were constantly plagued by radio-equipped fishing sampans which promptly reported the subs' positions to Japanese headquarters.

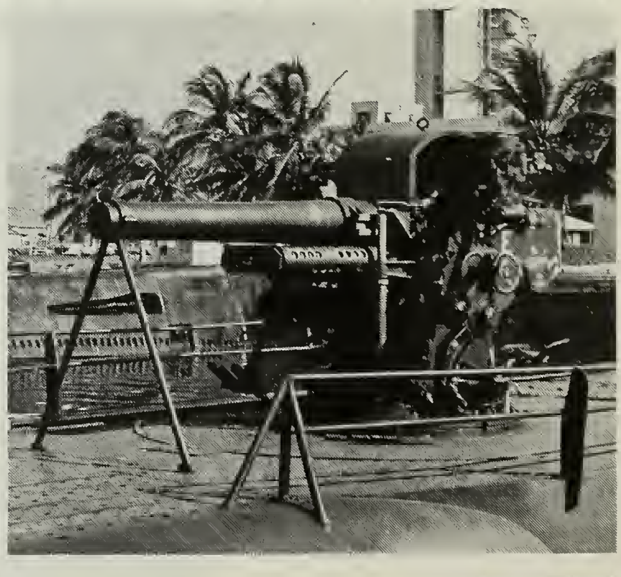
To cope with this situation and, at the same time, conserve torpedoes, the Navy installed a 5-inch/25 deck gun on USS *Devilfish* (SS 292). This weapon proved to be the last gun in development for submarines. It was capable of expeditiously dispatching the wooden-hulled sampans and their radios to Davy Jones.

Although the deck gun was intended as a weapon secondary to torpedoes, submariners usually gave it a warm place in their hearts. Most regarded it as pretty reliable insurance.

Not only was the deck gun at times a formidable weapon, it also had a tremendous psychological effect on the crew. They knew that if they were forced to the surface, they still weren't helpless. Compared to the armament of a surface man-of-war, this may have seemed like a boy hunting lions with a popgun, but such guns could be dangerous.

ON THE *SPOT*—Deck gun of *USS Spot* (SS 413) was last of its kind when the sub was transferred to Chile.





FIRE AWAY—Gun crews man deck guns of sub during WW II. *Rt: USS Silversides* (SS 236) sets out to sea.

Consider the experience of USS *Silversides* (SS 236), for example. On 10 May 1942, she sighted a 300-ton craft which appeared to be a trawler. *Silversides,* under command of LCDR (now RADM, Ret.) Creed C. Burlingame, went to the attack with her deck gun even though sailing through mountainous seas caused by a nearby typhoon. As LCDR Burlingame suspected, the trawler turned out to be a patrol boat, in disguise and armed to the teeth.

Both sides opened fire and a pitched battle commenced. Even with her decks partially submerged to provide additional stability and a smaller target, *Silversides* pitched so much that she found it difficult to keep her crew on deck. Each time a large wave would hit the sub, her crew would be washed about the deck. Nevertheless, the gun crew found its target again and again but, because of her wooden hull, the patrol boat refused to sink.

The opponent fought back by spraying the sub's deck with machine gun fire, which finally hit and killed the second loader. Nevertheless, *Silversides* kept up the fire until, at the end of an hour's combat, the patrol boat was completely riddled and a total loss.

History records a number of other instances in which a submarine and surface ships slugged it out with guns. *Spot,* for example, used her deck gun to sink two diesel trawlers while on her first patrol in 1944 in the East China Sea. Four days later, she sank a 1200-ton freighter with her deck gun.

During *Spot's* second patrol, in February 1945, she used all her torpedoes and prepared to return for reloads. She surfaced; was sighted and chased by an enemy minelayer.

Since his ship was in shallow water, *Spot's* skipper, CDR (now RADM) W. S. Post, Jr., had no choice but to fight it out with the sub's deck gun. The minelayer and the submarine exchanged rapid fire at close range until *Spot's* gunners blew off the minelayer's forward gun. That ended the action.

Until its transfer to the Chilean navy, *Spot's* gun sported a large white "E." Since *Spot* was, for some time, the only submarine in the U. S. Navy that carried a deck gun, she was her own competition.

Undoubtedly, when *Spot's* crew, along with the crews of other submarines which were armed with deck weapons, reach the honored status of "grizzled old salt," they will look down their noses at the electronically guided missiles, which have usurped the place of deck weapons, and interject a pointed comment or two on the superior skill it took to knock out an adversary when submarines were armed with deck guns.

—F. M. Milas, LTJG, USN.

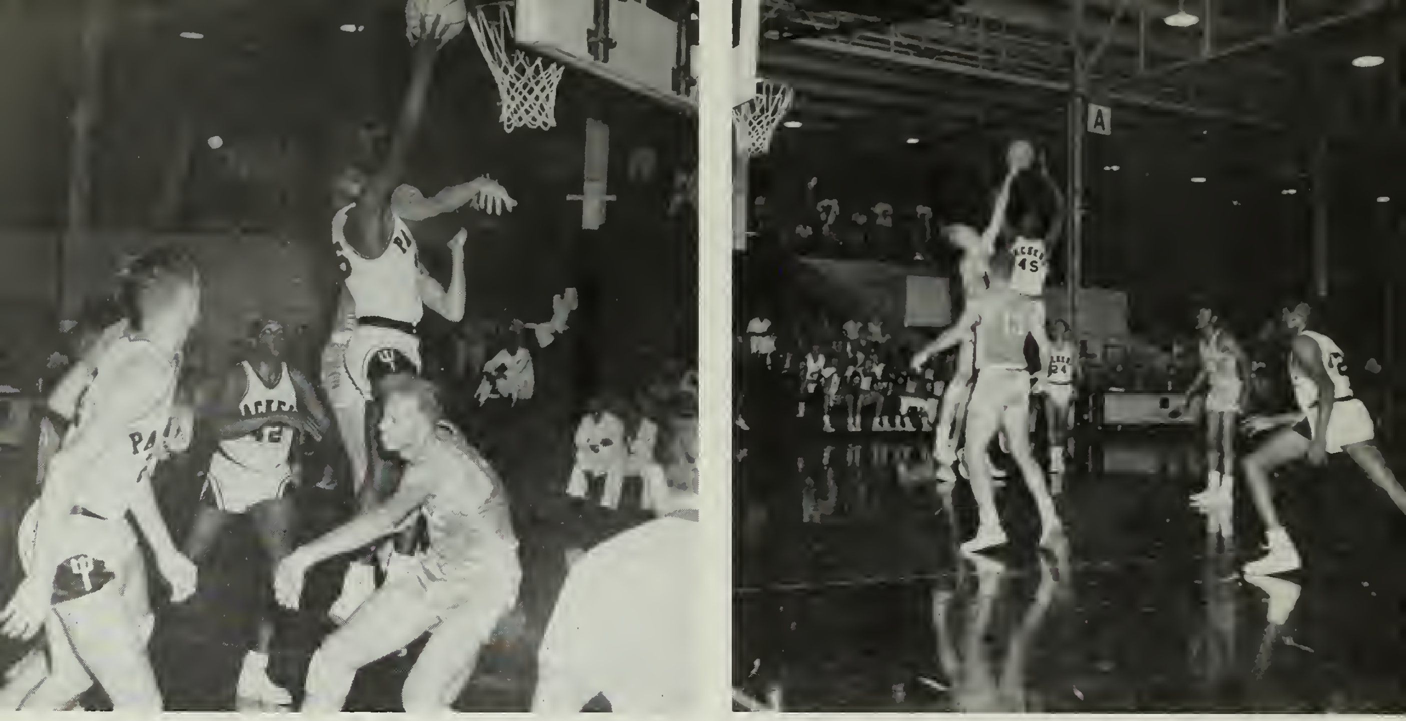
Rigging Record

A new Navy rigging record has been claimed by an oiler and destroyer serving with the Sixth Fleet.

USS *Canisteo* (AO 99) and Perry (DD 844) rigged lines and hoses in two minutes and 20 seconds while refueling in the Med.

Earlier the same day *Canisteo* and *Ault* (DD 698) rigged lines in two minutes and 21 seconds, but *Perry* later came alongside and lowered the mark by one second.

OUT OF RESERVE—USS *Kankakee* (AO 39), recommissioned in November, is assigned to MSTS for point-to-point military cargo runs.



CHAMPS — ServPackers, All-Navy Champs for third straight year, go for the basket in WESTPAC tourney.

All-Navy Cagers Crowned

POISED, POWERFUL SERVPAC, rapidly acquiring status as the New York Yankees of Navy basketball, rolled to an unprecedented third straight All-Navy cage title at Norfolk, Va.

The polished Packers flashed an airtight defense combined with a deliberate offensive style emphasizing ball control and the good shot. Shrewdly handled for the third straight year by LCDR Gene McGuire, and ramrodded on the court – also for the third successive year – by former Hamline (Minn.) College great Jack Stromberg, they racked up four straight wins en route to their fourth Navy-wide hardcourt crown in the past five seasons.

The scores:

First day: SUBLANT – 74, PRNC – 69; SERVPAC–91, NAS Norfolk–59.

Second day: NAS Norfolk – 86, PRNC–77; SERVPAC–66, PHIBPAC–54.

Third day: PHIBPAC–86, NAS Norfolk–71; SERVPAC–64, SUBLANT–49.

Fourth day: PHIBPAC–81, SUBLANT –78.

Fifth day: SERVPAC – 56, PHIBPAC – 51.

Capacity crowds of more than 1500 round-ball enthusiasts sat in on each of the five nightly sessions, staged at the NAVSTA Norfolk gym, and smoothly handled by host command COMSERVLANT.

They witnessed Navy basketball at its best, as the all-winning sweep by the magnificent monopolists from out Pearl Harbor way left the All-Navy hopes of four fine teams shattered in its wake.

There were, for example, PHIBPAC's talented Invaders from Long Beach—except for SERVPAC as good a club as the Navy has glimpsed for years and years. The West Coast Region stalwarts are as frustrated as one team can be these days, after finishing a close second to the Packers for the second straight year.

There were SUBLANT's big Sea Raiders, making their first All-Navy appearance and loaded for bear for a big try which didn't quite come off. Included too were NAS Norfolk's scrappy Flyers, a club which muddled through the regular season with a sub-par 12-17 record, then made it into the All-Navy by winning both their district and regional tournaments on sheer hustle and desire. They found those commodities weren't quite enough when the blue chips went on the line. And finally there was North Atlantic Region representative Potomac River Naval Command – a young team which came to shoot, and did that very well, but couldn't find a way to stop its opponents from scoring more.

The day-by-day rundown:

First round action featured victories by defending champ SERVPAC and top challenger SUBLANT, as PHIBPAC drew the bye.

SUBLANT, paced by three-time All-Navy selectee Shed Mitchell and ex-Princeton University captain Don Swan, led PRNC 61-41 midway through the second half of the night's opening set-to before jump-shot artist Chuck Jones led a late rush which pulled the NORLANT crew to within four points with some two minutes remaining. Mitchell, a snaky six-foot-four with all the moves, poured in 27 points, and Swan added 17. Jones topped PRNC with 18.

In the nightcap, Norfolk's Flyers stayed with SERVPAC through the first half, trailing by only 31-36 at that juncture, only to see the classy Pacific Area reps explode for 43 tallies in the final 13 minutes to turn a good game into a rout. Six-four rebounding star General Lee Davis and former Cal flash Jack Grout, six-six, both returnees from last year's championship club, led the Packers with 15 markers each, while Stromberg chipped in 14.

PHIBPAC, losers to SERVPAC in a real sizzler, 76-73, in last year's final at Pearl Harbor, got a chance for revenge the following day, but just couldn't crack the rock-hard Packer defense. They couldn't find a way to contain Stromberg and Davis either. Six-three Stromberg, the man with the virtuoso's touch on his soft jump shots, eeled his way through and around the Invaders for 23 big points, while the bull-like Davis added 15, and took command of the boards. PHIBPAC's tough little Jim Henry, a five-ten driver whose systems are all "go," pounded in a game-high 25 counters, but couldn't get enough help from his mates.

In a losers' bracket match the same night, meanwhile, NAS Norfolk got a tournament-high 31-point production out of five-eleven guard Arnie Harris, and utilized a devastating fast break to eliminate PRNC from further competition. Harris' points were all needed too, as the Flyers, on top by 37-29 at the rest period, outlasted the tenacious NORLANTers through a wild second half.

It was SUBLANT's turn to take a crack at SERVPAC the following night, but Shed Mitchell and company fared no better than previous challengers.

Trailing badly, the Red Raiders gave it a good try with a flaming, Mitchell-led, last gap rally which sliced the deficit to just 42-48 with some four minutes left. Davis took a hand at this point, however, and killed the Submariners' chances for good and all. The springy-legged General Lee stuffed in the next eight points, and gathered in several key rebounds as the Packers pulled away at the finish. Davis' 21 points took game honors, while Mitchell's 17 was tops for the losers.

NAS Norfolk became the second team to fall by the wayside – tossed there by a hot-shooting PHIBPAC outfit led by the incomparable Jim Henry. Henry's 22 points included a perfect 14 for 14 at the foul line.

The struggle for survival and a chance at a rematch with SERVPAC the following night produced a barnburner, as PHIBPAC and SUBLANT had at each other through 40 furious minutes in a game tied 12 times in all, the last at 72-72 with about three minutes remaining. Big Fred Mims hit two key buckets at that point to send PHIBPAC out in front again, and the Invaders nursed their slender edge to the wire. Henry with 26 and back-court partner Jim McKnight with 21 led PHIBPAC's charge, while Mitchell gave it all he had for SUBLANT with a 24-point showing.

The SERVPAC-PHIBPAC championship hassle was practically a replay of last year's final game, with the Packers leaping into a big 10-point halftime edge, then holding off the never-say-die Invaders through a ding-dong second session.

PHIBPAC twice cut SERVPAC's second half margin to a mere two points, and pulled to within three, at 51-54, with 22 seconds left, before two clutch free throws by the ever-present General Lee Davis sealed the PACCOAST entry's doom.

Balanced scoring featured SERVPAC's title winning effort as Brian Kniff, a muscular, six-four former UCLA performer whom the Packers augmented from Pearl Harbor's SUBPAC club, led the way with 16 points. Davis and Stromberg were right behind with 15 and 14, respectively.

An equally valuable contribution to the Packer cause, however, came from still another SUBPAC augmentee, guard Chuck Henry. Lightning fast, the five-ten Henry, a veteran of many years of Navy ball, dogged PHIBPAC's equally swift Jim Henry all over the court in a dramatic head-to-head duel, and held the Invader ace to just 13 tallies – far below his previous 24-point average.

SUBLANT's Mitchell posted the top average, 22.7 for three games, while Jim Henry's 86 total points in four games led all scorers. Mitchell, Henry, SERVPAC's Davis and Stromberg, and Bob Hyland of NAS Norfolk were named to an all-tournament team selected by writers covering the meet. — Jerry McConnell, JO1, USN.

Summary of Regional Basketball Results

SERVPAC, PHIBPAC, SUBLANT, NAS Norfolk and PRNC won the right to contest for the All-Navy basketball title by surviving fierce regional competition at widely scattered sites. And the 23 teams which battled it out in the five regional meets were the winners of earlier district and base-level eliminations.

Here is a summary of regional tournament action:

Atlantic Fleet Regional—at Newport, R. I.

PHIBLANT—91, MINLANT—65
DESLANT—94, FMFLANT—85
CRULANT—61, SERVLANT—41
FMFLANT—104, MINLANT—47
DESLANT—91, PHIBLANT—56
SUBLANT—70, CRULANT—45
FMFLANT—79, PHIBLANT—74
CRULANT—62, SERVLANT—61
SUBLANT—80, DESLANT—79
FMFLANT—108, CRULANT—68
DESLANT—92, FMFLANT—91
SUBLANT—82, DESLANT—62

Western Pacific Regional – at Pearl Harbor

SERVPAC—67, SUBPAC—60
SUBPAC—64, SERVPAC—47
SERVPAC—56, SUBPAC—53

South Atlantic Regional—at Norfolk, Va.

NAS Pensacola – 108, NAVSTA Roosevelt Roads—68
NAS Norfolk – 91, NAS Corpus Christi—80
NAS Corpus Christi—93, NAVSTA Roosevelt Roads—78
NAS Pensacola – 82, NAS Norfolk—71
NAS Norfolk – 98, NAS Corpus Christi—80
NAS Norfolk—105, NAS Pensacola—85
NAS Norfolk—72, NAS Pensacola – 70

North Atlantic Regional—at Newport, R. I.

3ND Coast Guard—62, NAVBASE Boston—57
NTC Great Lakes – 91, NAVSTA Philadelphia—68
3ND Coast Guard—85, NAVACTS Italy—72
PRNC—88, NTC Great Lakes—76
NAVSTA Philadelphia – 84, NAVACTS Italy—68
NAVBASE Boston—93, NTC Great Lakes—83
PRNC—71, 3ND Coast Guard—58
NAVBASE Boston – 78, NAVSTA Philadelphia—76
NAVBASE Boston—71, 3ND Coast Guard—65
PRNC—112, NAVBASE Boston—98

Pacific Coast Regional—at Treasure Island, Cal.

PHIBPAC – 95, NAS Whidbey Island—76
PHIBPAC – 79, NAVSHIPYD San Francisco—64
NAS Whidbey Island – 74, NAVSHIPYD San Francisco—71
PHIBPAC – 85, NAS Whidbey Island—65

THE BULLETIN BOARD

Report on Augmentation Program of Officers into Regular Navy

If you're a Reserve or temporary Regular officer who's seeking an appointment in the Regular Navy, you should consult the detailed guide to the Augmentation Program which is covered in BuPers Inst. 1120.12I. Among other things, the expanded directive on Regular Navy Augmentation contains:

- New dates of rank for eligibility.
- New service and active duty requirements.
- Clarification of the "special" fitness report.
- Detailed answers to the questions most asked by officers in the past (see box).

In general, the Augmentation Program permits Naval Reserve officers in the grades of ENS, LTJG, LT, and LCDR, and Regular Navy officers who hold temporary commissions in the grades of ENS, LTJG, and LT, including LDOs, to apply for appointments as permanently commissioned officers of the Regular Navy.

Eligibility

Before you apply for augmentation, you should be able to meet certain eligibility requirements.

Seniority—If you're a Regular Navy ENS, LT, or LTJG who serves in a temporary commissioned status (including LDO), you must request appointment in the Unrestricted Line or Staff Corps category for which you are best qualified.

If you are a Reservist, and are not senior to the established lineal position in your category (BuPers Instruction 1120.12I contains a complete listing), you must request appointment in the Line or Staff Corps category for which you are best qualified.

Citizenship — You must be a citizen of the United States.

Service — If you are a male officer, or a woman officer of the Nurse Corps, you must have served on active duty in commissioned status for at least 18 months before you apply for augmentation. Periods of duty under instruction for more than 30 days must be excluded when computing service to meet this requirement. (An exception: If you were commissioned from the contract NROTC and your period of obligated service includes 24 months of active duty, you may submit your application after 18 months of service.)

If you are undergoing or have completed flight training, you may not apply for augmentation until you have served on active duty for at least 18 months as a naval aviator. (Flight training, replacement air group training, and other duty under instruction for more than 30 days must be excluded when computing service.)

Women officers (other than Nurses) are not required to have served on active duty before requesting augmentation. However, if selected for augmentation, appointments may not be issued until at least six months of active duty service have been completed.

If you have fulfilled the necessary service and active duty requirements, and are otherwise eligible, you may request augmentation from an inactive status anytime within three years of your release from active duty. After three years, you may not request augmentation until you have returned to active duty and have served another 12 months. (Again, all periods of duty under instruction in excess of 30 days must be excluded when computing service.)

All-Navy Cartoon Contest
LT Billups E. Lodge, USN

"Here it is, Chief—that bucket of red polka-dot paint you sent me for."

Dependents — There are no dependency restrictions for men. If you're a woman, you will not be considered for selection if you are the natural or adoptive parent of a child under 18 years of age; if you have personal custody of a child under 18; if you are the stepparent of a child under 18 and the child lives in your household for a period of more than 30 days a year; if you are pregnant; or if you are the mother of a child under 18 over whom you have not lost all rights of custody and control through formal adoption proceedings.

Education — Special Duty (Law-1620) applicants must have a degree from a law school accredited by the American Bar Association and must be members of the bar of a federal court or the highest court of a state or territory of the U. S. or District of Columbia.

Nurse Corps (2900) applicants must be high school graduates and must be registered nurses.

Medical Service Corps (2300 and 2300W) applicants must meet the educational requirements for original appointments in their present specialty or Corps section.

Chaplain Corps (4100) applicants must be graduates of approved schools of theology or have completed at least 90 semester hours (three years) of graduate work in schools of theology. In addition, Chaplain Corps applicants must have completed at least 120 semester hours of undergraduate work. (Duplication of credits is not permitted.)

Civil Engineer Corps (5100) applicants must possess at least a baccalaureate in civil, mechanical, electrical, architectural, mining, petroleum, electronic, nuclear, chemical or construction engineering, or in architecture. If you possess some other engineering degree, your application will receive special consideration. Your degree must have been issued by an accredited school listed by the Engineer's Council for Professional Development.

Age — When you request augmentation you must compute your total active service with a view towards the future. If you are a man, your total active service must equal not less than 20 years upon reaching age 62. Nurse Corps officers must have 20 years' total active service upon reaching age 55, and other women officers must have completed 20 years' total active service by the time they reach age 50.

Retirement — If you would be eligible for retirement within three years after being appointed in the Regular Navy, you may not apply for augmentation.

Physical — You must be able to meet physical standards appropriate to your grade, as established by the Chief, Bureau of Medicine and Surgery. Minor defects which do not interfere with performance of duty will not be disqualifying.

Application

If you have not requested augmentation in the past you may submit an application any time you are eligible. If you previously requested augmentation and were not selected you may not submit a new application for at least one year after the date of the previous application.

Your application should be submitted in letter form to the Chief of Naval Personnel (Pers-B6252), via your commanding officer. The letter should contain the following:

Designator for which application is made. (If you apply for two designators, indicate your order of preference.)

Inclusive dates of all your active service.

Your date of entry on current tour of active duty. If on inactive duty, note the date you were released to an inactive status.

Your date of rank.

Certification that you have completed at least 18 months of active duty as a commissioned officer in the Regular Navy or Naval Reserve. (Periods of duty under instruction in excess of 30 days don't count.) The 18-month certification is not required if you apply for an 1100W, 2300W, or 3100W designator.

"The Chief must be in one of the critical ratings—he criticizes just about everything I do."

If you're an aviator, note the date you reported to your first permanent duty station after you completed flight training.

List the source through which you received your commission (NROTC, Officer Candidate School, etc.).

List any information you think should be brought to the attention of the Augmentation Selection Board.

Your commanding officer's endorsement should include a specific recommendation and any comments which may be appropriate.

Supporting Documents

A number of supporting documents must be submitted with your letter of application:

A special fitness report must cover the period between submission of your last regular fitness report and the date of your application. This report should not be sent to the Fitness Report Section of the Bureau of Naval Personnel, and does not take the place of any fitness reports required under other directives. Your next regular fitness report should include the period of time covered by the special augmentation report. (BuPers Instruction 1120.12I contains additional fitness report requirements.)

College transcript. If you have earned a degree, evidence of this and a transcript of all college credits you earned should be included. If you are attending college at the time of application, you should include a transcript of all work through your most recent marking period.

This Will Give an Idea of Your Chances of Selection

Your chances for an appointment in the Regular Navy through the Augmentation Program may be anywhere from poor to good, depending on service requirements and your general qualifications. Here's a review of the applicants considered and selected during fiscal year 1961:

Designator	*Considered*	*Selected*
1100	573	260
1100W	82	73
1310	1788	788
1350	192	88
1620	13	10
2300	42	4
2300W	11	0
2900	92	69
3100	179	113
3100W	4	0
4100	53	20
5100	42	29
Total	3071	1454

You should note that these are not "typical" figures of augmentation selection opportunities. The number of future selections in all categories may vary considerably.

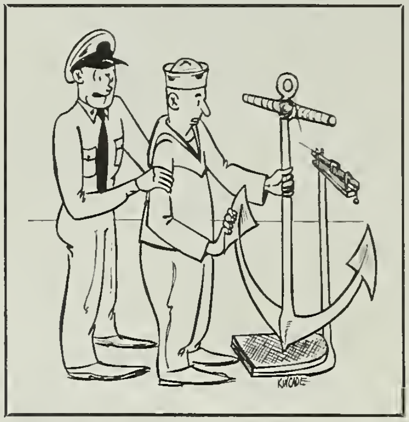
Before each session of the Augmentation Selection Board convenes, a count is made of the number of Regular Navy officers in each designator and each year group eligible for augmentation. If the number in a particular year group is near the maximum allowed for that category, a quota limitation may be imposed. This results in slim selection opportunities in some designators, while in others there is no limitation on the number selected. The on-board count varies from month to month, so it's usually not possible to predict with accuracy the selection opportunities in a particular designator for any particular session of the board.

Statement of Personal History. This is DD Form 398. Complete all items; forward the original only.

Armed Forces Security Questionnaire. DD Form 98; submit the original only.

Report of Medical Examination (Standard Form 88). If your duties involve flying, submit the original and two copies; otherwise, submit the original and one copy. This form must be signed by a medical officer and, if available, a dental officer. The report must contain the following statement, signed by the examiners: "We certify that this candidate is (or is not) qualified for appointment as an officer not restricted in the performance of duty in the (line, restricted line, staff corps) of the Regular Navy." In addition, if your duties involve flying, you must have appropriate entries concerning your physical qualifications and aeronautical adaptability for the type of duty involved and, if appropriate, a notation of the service group for which you are qualified.

All-Navy Cartoon Contest
LTJG Paul B. Kincade, USN



"Now I'll go over it once more, Melvington . . . In the Navy, when the captain says, 'Weigh the anchor . . .' "

Report of Medical History (Standard Form 89). Be sure to submit an original copy of this report.

Certification of Completed Security Investigation (NavPers 2716) may be submitted if a satisfactory National Agency Check or background investigation has been completed. If not, comply with the instructions contained in BuPers Instruction 5521.2D, paragraph 5.

Dependency Statement. Women applicants must provide signed statements which certify they meet dependency requirements (see above).

Evidence of receipt of a law degree and admission to the bar (as specified above) must be submitted if you apply for appointment as a Special Duty (Law—1620) Officer.

Registered Nurse License (copy) must be submitted by Nurse Corps applicants.

Ecclesiastical endorsement by officials of your denomination, authorizing your acceptance of an appointment in the Regular Navy, is required if you apply for appointment in the Chaplain Corps.

If you are not on active duty, Bu-

Any More Questions on Augmentation?

Many questions concerning the Reserve to Regular Augmentation Program are processed each month by the Chief of Naval Personnel. These are the most common:

Q: *Why wasn't I selected for augmentation? I was eligible, wasn't I?*

A: The Augmentation Selection Board, which deliberates in closed session, does not record the reasons behind non-selection. No doubt you were eligible or your name wouldn't have gone before the board in the first place.

The board considers all available information and compares your application with the applications of other officers applying for the same designator. Your demonstrated ability, service experience, motivation, physical condition, assignability and education are all compared to the same qualifications held by your Regular Navy contemporaries. (See box on selection opportunities, p. 59.)

Q: *I understand a college degree isn't required before I can be augmented into the Regular Navy. Correct?*

A: A college degree is required only for certain categories (see Education, p. 58). Many officers who have completed less than four years of college have been augmented, mostly in the 1310 designator.

Q: *Is an OOD underway qualification mandatory for augmentation in the unrestricted line (1100)? Is any sea duty necessary?*

A. Neither is mandatory — but both would be helpful. It would be to your advantage to have the OOD underway qualification in your record when your name goes before the board for consideration. The chances are slim that officers of the grade of LT and above, who have not completed tours of sea duty, would be augmented into the Regular Navy. It is difficult to assign officers of the grade of lieutenant and above, who have not completed tours of sea duty, to billets at sea, commensurate with their seniority.

Q: *The official augmentation directive doesn't say much about the selection board. Could you fill in some details?*

A: The Augmentation Selection Board meets quarterly, usually in August, November, February and May. Applications are normally considered by the first session of the board which convenes after the application is received. If the application is received less than 30 days before the board convening date, it is usually held up for the next session.

Q: *If the board selects me for augmentation, how soon will I be notified?*

A: The time lapse between receipt of your application and notification as to whether or not you have been selected could be anywhere from two and one-half to five and one-half months. When the chief of Naval Personnel receives your application, he acknowledges with a letter advising you of the convening date of the board session which will consider your application. Also, you are notified of the board's recommendation within 45 days of the convening date.

Q: *May I voluntarily accept a loss of rank or lineal position if it would make me eligible for augmentation?*

A: If you are too senior to meet the augmentation eligibility requirements, you may not voluntarily accept a loss of rank or lineal position in order to become eligible.

Pers Instruction 1120.12I should be consulted for additional instructions concerning your application.

Selection

Your application for augmentation is considered by a selection board which meets quarterly. If you are selected, your appointment will normally be in the Regular Navy designator you requested. (In some rare cases, the selection board considers applicants who are extremely well qualified for appointments in designators they do not request. In these cases, the board recommends such appointments only if the applicants agree.)

Unless your designator is 1620, you will normally be appointed to the same rank you hold on the date the Regular Navy appointment is administered. Also, your date of rank remains the same. Officers who have 1620 designators may be adjusted to a more senior lineal position if so entitled in accordance with current provisions of public law.

Other details of the Augmentation Program, including the special procedures Medical and Dental Corps officers, and officers with designators of the 1400, 1500, and 1600 series (except 1620), should follow, are contained in BuPers Instruction 1120.12I.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 6 — Discussed the resale of foreign beverages sold by overseas non-appropriated fund activities.

No. 7 — Announced the receivership of the National Automobile Insurance Company. Personnel insured by this firm must seek other coverage.

All-Navy Cartoon Contest
LT Billups E. Lodge, USN

"What do you mean, 'The blast doors didn't close?' My console says they did!"

Instructions

No. 1120.12I — Outlines the eligibility requirements and processing procedures whereby certain USNR officers in the grades of ensign through lieutenant commander (temporary) and USN officers serving in a temporary commissioned status, not above the grade of lieutenant (including LDO, temporary), may apply for appointment as permanently commissioned USN officers.

No. 1120.33A—Invites applications from permanently commissioned USN and USNR officers for transfer between the unrestricted line and restricted line of the Regular Navy.

No. 1300.29A — Updates instructions for reporting, by activity, the number and location of Navy military dependents in Alaska, Hawaii, U. S. territories and foreign countries.

All-Navy Cartoon Contest
Otto Preske, SN, USN

"Reveille!"

No. 1560.10C — Sets forth details of the Navy's Tuition Aid program.

No. 5321.2E — Informs commanding officers, their seniors in the chain of command and manpower sponsors of the nature of the Manpower Authorization (NavPers 576), of the procedures for insuring its validity and of a forthcoming change in content.

No. 7300.6A — Revises the system for the collection and reporting of estimated costs incident to permanent changes of station.

Notices

No. 5321 (19 February) — Informed ships and stations of the elimination of the functional area code "W" in column 15 of the Manpower Authorization (NavPers 576).

No. 1520 (5 March)—Announced the convening dates for fiscal year 1963 for classes in the Foreign Language Division, Naval Intelligence School, Washington, D. C.

No. 1650 (5 March)—Provided information pertaining to the issuance of Good Conduct Award certificates and procedures for requesting certificates for awards previously earned.

No. 1020 (12 March)—Announced changes to *U. S. Navy Uniform Regulations, 1959.*

No. 1070 (12 March) — Issued instructions for the preparation, maintenance and distribution of a new page 12 and a revised page 13; and canceled the use of page 10 of the Enlisted Service Record.

No. 1520 (12 March) — Solicited applications from commissioned Navy and Marine Corps officers and midshipmen of the U. S. Naval Academy for Navy sponsorship in the December 1962 Rhodes Scholarship competition.

No. 1510 (15 March)—Announced the list of active duty enlisted personnel who have been provisionally selected by the NESEP selection board for entrance into the program.

No. 1440 (19 March)—Announced a change in the Navy enlisted rating structure and outlined procedures for changes in rating of active and inactive duty personnel to conform with the revised rating structure.

No. 1520 (21 March)—Announced the selection of officers for the submarine school class which convened in April at New London, Conn.

Amateur Radio Program Is Open to Military Hams on Armed Forces Day

Every collector has his mementoes or his specially prized tokens which are representative of his interest area. Amateur radio operators treasure their QSL cards or other written items that represent the operator's activity in the amateur radio world.

The armed services appreciate the radio amateur's pride and dedication. Because of this appreciation, the Army, Navy and Air Force sponsor an amateur radio communications program as part of the annual Armed Forces Day festivities. In conjunction with this program, a special, one-time only QSL card is issued for each military-to-amateur radio contact. These QSL cards are newly designed, colorful red, white and blue creations exclusively for the 19 May 1962 Armed Forces Day Communications Program.

This amateur radio program also features a CW code and a radioteletypewriter receiving contest. Special messages from the Secretary of Defense will be transmitted during these receiving contests. The texts of the two messages are different but amateur operators can, if they have the equipment, copy both messages and obtain two Department of Defense certificates of merit. Each certificate bears the name of the amateur operator and the signature and seal of the Secretary of Defense.

The CW code receiving contest is open to any amateur or shortwave listener who can copy International Morse Code at 25 words per minute. The radioteletypewriter (RATT) message is transmitted at 60 words per minute and is open to any amateur radio operator or other individual.

The three programs add up to the possibility of an amateur receiving five mementoes, consisting of three QSL cards and two certificates of merit. The amateur radio operator may receive a Department of Defense certificate of merit for a perfect copy of the CW or RATT transmission. If he successfully copies both messages, then he may receive two certificates. Headquarters radio stations of the Army, Navy and Air Force will operate on-spot frequencies outside the amateur bands. A military-to-amateur contact may be made with an Army station (WAR), Navy station (NSS), and an Air Force station (AIR). Thus, a QSL card from each contacted military headquarters station will mean that the card collector's corner will be brightened with the red, white and blue colors.

Over 4000 amateur-to-military contacts were made during the 1961 Armed Forces Day Communications Program, and 1273 certificates of merit were mailed to operators who submitted perfect copies of the CW and RATT messages. These figures are indicative of the number of amateur radio operators who have participated and collected, since the program's beginning in 1957, the special commemorative Armed Forces Day QSL cards and certificates of merit.

The complete operating schedules and competition procedures for the 1962 Armed Forces Day Communications Program are as follows:

Each transmission for the CW and RATT receiving contests will commence at the indicated times with a 10-minute CQ call to permit the participants to adjust their equipment. The 10-minute CQ will be immediately followed by the message from SecDef. It is not necessary to copy more than one station, and no extra credit will be given for so doing.

Transcriptions should be submitted

MILITARY-TO-AMATEUR TEST

Military stations WAR, AIR and NSS will be on the air from 191500Z (1000 EST) to 200500Z (2400 EST) on 19 May 1962 to contact and test with amateur radio stations. Amateur contacts will be discontinued from 200245Z to 200400Z to allow the Armed Forces Day CW and RATT broadcast competition in accordance with the schedule above.

Station	Military Frequencies (KCs)	Appropriate Amateur Band (megs)
WAR (Army Radio, Washington, D.C.)	4020 (AM)	3.8 to 4
	4025 (CW)	3.5 to 3.8
	6997.5 (CW)	7 to 7.2
	20994 (CW)	21.1 to 21.25
NSS (Navy Radio, Washington, D.C.)	4010 (CW)	3.5 to 3.8
	6970 (CW)	7 to 7.1
	7380 (CW)	7.1 to 7.2
	*13975.5 (CW)	14 to 14.2
		21.1 to 21.25 Novice Calls
	**4012.5 (AM)	3.8 to 4
		7.2 to 7.3
	14385 (SSB)	14.2 to 14.35
	3319 RATT	3.5 to 3.8
	7895 RATT	7 to 7.2
	14480 RATT	14 to 14.2
AIR (Air Force Radio, Washington, D.C.)	3397.5 (CW)	3.5 to 3.8
	13995 (CW)	14 to 14.2
	20873 (CW)	21 to 21.25
	*7305 (SSB)	7.2 to 7.3
	*14405 (SSB)	14.2 to 14.35
	7915 (RATT)	7 to 7.2

*** The Novice Section of the 15-meter band will be monitored primarily for those new operators who may be unable to work into the 40- and 80-meter bands. Contacts will be acknowledged on 13975.5 KCs.**

**** Operator transmitting on 4012.5 (AM) will listen in the AM, SSB, sections of the 40- and 75-meter bands for AM or SSB stations.**

*** Operators transmitting on these frequencies will listen for AM or SSB signals within the appropriate bands.**

Military stations will listen for calls from amateurs within the appropriate amateur bands. Contacts will consist of a brief exchange of location and signal report. This is a test of military-to-amateur communications and no traffic handling or message exchange will be permitted.

"as received." No attempt should be made to correct possible transmission errors. Time, frequency and call sign of the station copied should be indicated, as well as the name, call sign (if any) and address of the individual submitting the copy.

Competition entries should be submitted to the Armed Forces Day Contest, Room 5B960, The Pentagon, Washington, D. C., and postmarked not later than 31 May 1962.

CW RECEIVING CONTEST

Time 19 May 1962	Transmitting Station	Frequencies (KCs)
200300Z (2200 EST)	WAR/AIR (Army & Air Force Radio, Washington, D.C.	3347, 14405, 20994
200300Z (2200 EST)	NSS (Navy Radio, Washington, D.C.)	3319, 4010, 6970, 13975.5
200300Z (1900 PST)	A6USA (Army Radio, San Francisco, Calif.)	6997.5
	NPG (Navy Radio, San Francisco, Calif.)	3319, 7595, 14927.5
	NPD (Navy Radio, Seattle, Wash.)	7455
	AG6AIR (Hamilton AFB, Calif.)	7832.5

RATT RECEIVING CONTEST

Time 19 May 1962	Transmitting Station	Frequencies (KCs)
200335Z (2235 EST)	WAR (Washington, D.C.)	3347, 14405, 20994
	NSS (Washington, D.C.)	3319, 7895, 14480
	AIR (Washington, D.C.)	7915
200335Z (2135 CST)	A5USA (Ft. Sam Houston, Tex.)	5395
	NDS (Great Lakes, Ill.)	7455
	AG5FFR (Randolph AFB, Tex.)	7305
200335Z (1935 PST)	AG6AIR (Hamilton AFB, Calif.)	7832.5
	A6USA (Army Radio, San Francisco, Calif.)	6997.5
200345Z (2145 CST)	NDF (New Orleans, La.)	7380
	NDW (San Francisco, Calif.)	3319, 7375
	NPD (Seattle, Wash.)	7455

Mail in Your Entries for All-Navy Cartoon Contest

This is the last call for U. S. Navy cartoonists to submit their entries in the seventh All-Navy Cartoon Contest.

The rules this year are similar to those of former years. The contest is open to all active duty naval personnel and their dependents..

Anybody falling into these categories who feels capable of drawing a chuckle-producing gag or situation cartoon with a Navy background should submit his entry on eight- by ten-and-a-half-inch white paper or illustration board.

To be acceptable, the cartoon must have a Navy theme or background and must be in good taste.

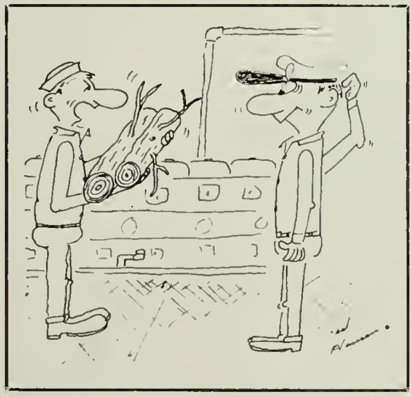
All cartoons entered must have the following information securely attached to the back:

Full name of the originator; rate/grade; serial/file number; duty station; home town and home town newspaper; command recreation fund administrator; and a brief statement certifying the cartoon to be original.

In addition, the following statement must be attached to the cartoon:

"All claims to the attached entry are waived and I understand the Department of the Navy may use as desired."

All-Navy Cartoon Contest
Peter A. Hansen, EN2, USN



"I couldn't find any smooth logs Chief, but don't worry, I'll run these up to the carpenter shop."

The statement is then signed by the contestant and forwarded via the contestant's commanding officer or his representative.

If the contestant is a dependent of a Navyman, the cartoon must bear this certification:

"I am a dependent of rate/grade; serial/file number."

All entries will become the property of the Navy Department and will not be returned. They must be in the hands of the Chief of Naval Personnel (Attn: Pers-G11) by 1 Jun 1962.

The five cartoons that produce the biggest guffaws from the judges will be awarded All-Navy championship trophies furnished by the Chief of Naval Personnel. The trophies will be forwarded to the winners via their commanding officers.

All winning cartoons will be published in ALL HANDS Magazine, and suitable mention will be made in the *Special Services Newsletter.*

Aside from ALL HANDS Magazine's announcements concerning the contest, no other notices have been published. Get your entries in early.

High Flying and Scuba Diving Don't Mix, Docs Say

Navy fliers who like Scuba diving have had a ceiling placed over them by the Naval School of Aviation Medicine.

The school evaluated the effect of flying at high altitudes after diving to various depths. The study resulted in naval airmen being forbidden to fly higher than 18,000 feet within 12 hours after diving to depths of 30 feet or more, the report said.

All-Navy Cartoon Contest
Theo. H. Tennant, YNC, USN

"Evening, Captain"

TAFFRAIL TALK

As our more perceptive readers may have noted by glancing through a few columns of Taffrail (assuming of course that they read it more than once), it often consists of miscellaneous items we can't find a place for in our more respectable departments, plus semi-professional complaints and congratulations.

Where, for example, would you place the most astute observations of LTJG Albert E. Blackburn, a supply officer, speaking on the subject of pay and allowances? Pay and allowances (except ours) always leave us somewhat baffled, so we'll have to take the lieutenant's word for it that LCOL John H. Glenn, Jr., earned a grand total of $8.00 ($1.60 per hour for five hours) while orbiting the earth three times back in February. This consisted of base pay, flight pay (since he managed to get in his four hours' flight time), basic allowance for quarters and basic allowance for subsistence. He was not eligible for per diem since he had made a round trip in less than 10 hours in one calendar day. Since he was traveling in a government vehicle, he was not eligible for mileage allowance, which is a good thing (for the government). Had he collected his mileage, it would have amounted to $8100 (81,000 miles at 10 cents per mile).

★ ★ ★

The rescue of downed airmen at sea by helicopter is common. However, USS *Paul Revere* (AKA 248) has pulled a switch — it managed to rescue a clutch of downed chopper men. Forced to abandon their ailing flying machine a few miles from *Revere,* the red-faced (and shivering) coptermen were plucked from the sea within six minutes after their crash.

★ ★ ★

We have additional firm evidence that someone *does* read the magazine — other than those who write in to tell us of our boners. This new evidence comes to us in the form of an unsolicited press release. It seems that a couple of years ago Martin J. Noone, AQ1, was idly thumbing through a copy of this magazine while on duty at South Weymouth, Mass., when he read an article entitled "How to Earn the Dolphins." We were so persuasive that Noone decided then and there, airdale or not, the submariner's life was for him.

Now our source says Noone has finally been awarded his silver dolphins, is serving in USS *Sargo* (SSN 583), and is very happy with his change of status.

★ ★ ★

And while this fine glow of satisfaction lasts — it's a fleeting thing at best — we must also modestly admit that we have, right here in our very own office, a man who knows practically as much about Shorvey and Seavey as the experts who are responsible for the program. He is Dan Kasperick, JO1, USN, who, working with the numerous "cognizant desks" in the Bureau of Naval Personnel, pulled together the mountain of facts which you will find in our current Seavey-Shorvey roundup. We have learned the hard way never, no never, to make any claims about nothing, but, with the exceptions of CDR F. B. Buchanan and LT F. J. Reeg, of the Distribution Control Section, if anyone wants to challenge our claim, we will back our Dan against anyone. The weapons will be data rotation cards at 150 paces.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Information Bulletin, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

DISTRIBUTION: By Section B-3203 of the Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicates that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the purpose of the magazine.

The Bureau invites requests for additional copies as necessary to comply with the basic directives. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U. S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant.

PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C. The rate for ALL HANDS is 25 cents per copy; subscription price $2.50 a year, domestic (including FPO and APO address for overseas mail); $3.50 foreign. Remittances should be made to the Superintendent of Documents. Subscriptions are accepted for one, two or three years.

- **AT RIGHT: SEA SURGERY** — Senior flight surgeon on board USS *Enterprise* (CVAN 65) demonstrates how the ship's modern sick bay is prepared to handle medical emergencies at sea. ➧

SUPPLY

Memorial Day 1962

LET US ALWAYS REMEMBER

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

JUNE 1962 Nav-Pers-O NUMBER 545

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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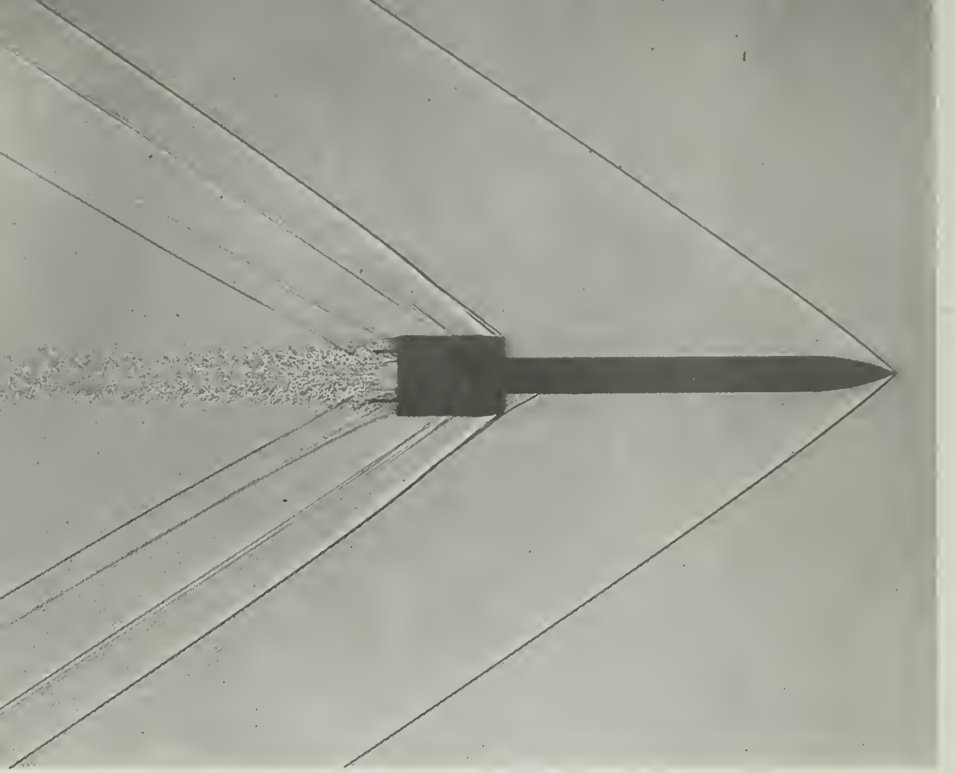
CDR F. C. Huntley, USNR, **Editor**
John A. Oudine, **Managing Editor**

Associate Editors
G. Vern Blasdell, **News**
Jerry Wolff, **Research**
Don Addor, **Layout & Art**
French Crawford Smith, **Reserve**

• FRONT COVER: SEEING THE WORLD — Navymen in the Mediterranean, like fellow voyagers in ports of call throughout the world, get set for fun and adventure as their ship moors to a buoy at Valletta, Malta.

• AT LEFT: REFLECTIONS — A Navyman takes time out for reminiscences while watching the lights from a nearby ship in the harbor waters at Yokosuka, Japan.

• CREDIT: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.



SHAPE OF IT — Photo taken in pressurized ballistics tunnel shows shock waves of projectile.

Navy Gets a Bang Ou

ANY ACCOUNT of the development of naval ordnance usually leads to a reference to NOL. That is the short term for the Naval Ordnance Laboratory, at White Oak, Md.

NOL is where the genesis of many a Navy weapon begins, whether it be a bullet or a bomb, a mine or a missile, a shell or a satellite. First there is an idea. The idea may originate at NOL or it may be brought to the Naval Ordnance Laboratory with the questions, "What do you think of it?" "How can it be improved?" and "Will it work under the conditions in which we want it to work?"

These questions come primarily from the Navy. However, despite the large bronze sign in front of the laboratory which makes it clear the laboratory is the *Naval* Ordnance Laboratory, its work is not confined exclusively to research on naval weapons.

Ten per cent of NOL's 45-million dollar annual budget is furnished by, and spent upon, work which comes from the Navy's Bureau of Ships, the Army and Air Force, the Atomic Energy Commission and the Defense Atomic Support Agency.

In the past, this has included development of much of the aerodynamic design data for *Atlas*, *Titan*, *Terrier*, *Talos*, *Tartar*, *Nike-Zeus* and *Pershing*, in addition to *Polaris*.

FOR THE NAVY the laboratory has in the last decade completed research on, and released for production, substantially more than 100 new weapons, which include a number of highly sophisticated mines, antisubmarine warfare weapons and detection devices, a radical new submarine sonar, and *Betty* and *Lulu* (two nuclear antisubmarine depth charges).

TARTAR missile is checked out by guided missilemen while at sea on *USS Henry B. Wilson* (DDG 7).

In addition to the work done for the government, the scientists at NOL let their energy spill over into nearby suburban community projects that range from giving talks to parents on how to control Junior's enthusiasm for his chemistry set to advising the University of Maryland Terrapins on how to produce a bigger bang from the cannon they fire at football games during half-time.

One of the major efforts at NOL is mainly concerned with how to repel the enemy's weapons and how to make U. S. weapons "attractive" to the enemy. This is done in the magnetic laboratory.

The building in which this work is done is located in a lonely spot in NOL's 875-acre reservation. When the building was constructed, it was designed to be as free from magnetism as was scientifically possible. The building is constructed of cinder block and wood. It is held together with copper nails. The floor drains are transite and the light switches are aluminum. Even the sand used in the concrete was screened to make certain it contained no minute particles of iron oxide.

THE BUILDING is surrounded by signs warning automobiles and lawn mowers to keep their distance. Despite these precautions, the scientists have had their difficulties. The building was used for a brief period by a bevy of female office workers. Their desks were placed on a hastily laid wooden floor. When the ladies were dispossessed, thousands of bobby pins, paper clips and thumb tacks which had worked their way beneath the floor boards had to be removed, in order to make the building non-ferrous, hence non-magnetic.

In this building the earth's magnetism is canceled by the use of large coils which encircle the building and surround the object being tested. In order to investigate a ship's magnetic field, the laboratory

# of NOL

uses more than one hundred ship models representing all classes of ships.

In this way, NOL scientists are able to specify, before the ship is actually built, the design for the degaussing coil which makes the ship unattractive to magnetic mines. This eliminates considerable trouble and expense later.

The lab has recently used a model of uss *Nautilus* (SSN 571) with a view toward degaussing her and others of her class.

The model of *Nautilus*, like all NOL's ship models, includes every magnetic factor to be found on the actual ship. This particular model, for instance, contains approximately 7500 individual pieces of steel which represent practically everything aboard, including 144 components in the after machinery space.

SOME OF THE magnetic laboratory's projects are way out – in space, that is. It has tested systems which have enabled satellites to remain earth-oriented while in orbit. It also checked out NASA's satellite S-3 to determine whether it was subjected to internal magnetic influences which would upset its measurement of the earth's magnetic field and cosmic energy surrounding the earth.

Another facet of magnetics is found in the magnetism and metallurgy division at the Naval Ordnance Lab (near Washington, D. C.).

END RESULT — Naval Ordnance Lab has played an important part in the development of missile might that arms today's ships of the Fleet.

Among other things, this laboratory develops materials which can be used in weapons such as magnetically operated mines, depth charges and torpedoes. It also develops airborne detection devices which are sensitive enough to indicate the presence of a submerged submarine.

Non-magnetic materials are as important to the magnetic materials scientists as are those with magnetic properties, perhaps more so. Science has been seeking, for some time, a non-magnetic metal which would be hard but not brittle and which would resist corrosion.

Heretofore, Navy divers working with magnetic mines have been forced to use tools which, although non-magnetic, are so soft that a pair

THE LAB—Torpedo is readied for test in pressure tank. *Rt:* Ordnance of past decorates entrance to building.

SEA DUTY — Oil-filled float for *Deep Dip* goes overboard. *Deep Dip* is an unmanned diving sphere developed by NOL for ocean research.

of pliers will bend in a man's hand. This, of course, is annoying to anyone who does a lot of plier squeezing.

NOL HAS RECENTLY developed a new alloy of nickel and titanium, both hard and non-magnetic metals, which it calls *nitinol* (for NIckel, TItanium and NOL). The alloy is hard without being brittle. It can be tempered to give one tool, a cold chisel for instance, different properties such as a hard biting edge and a shock-resistant shank and head.

Nitinol doesn't break easily and it can be kept in sea water almost indefinitely without corroding. It takes a cutting edge which stays sharp for long periods of time under heavy use and it can be buffed to a high polish which will not stain or tarnish — all properties which make it attractive to both civilian and military uses.

NOL also accomplished a breakthrough in the development of magnetometers by coming up with a small device sensitive enough to record the opening of a door in the next room (if it has a metal doorknob).

It was adopted by The Johns Hopkins University Applied Physics Laboratory for use in the *Transit* satellite and reduced to a package weighing only four ounces. Its power requirements are especially attractive to people in the satellite business because the little magnetometer has a power drain of only 20 milliwatts—sufficiently low to use solar cells.

SPACE WORK — Satellite *Injun*, part of a triple payload, gets magnetic checkout on electrical coil in Magnetic Facilities Laboratory at NOL.

When it is in production for the Navy, it will provide a cheap, easily portable device which can be more widely available than magnetometers now in use.

NOL HAS ALSO PIONEERED the development of magnetic amplifiers. Amplifiers which use vacuum tubes or transistors will eventually wear out. Amplifiers using magnetic materials go on ad infinitum, a quality which also makes them popular with the satellite people who find it difficult to change tubes in an orbiting satellite.

The NOL plastics division has made its influence felt throughout the services and the industrial world, too. This division came to the aid of World War II amputees by developing plastic hands which would function satisfactorily.

The first hands NOL developed were tested by a Marine colonel who had lost one of his own in the Pacific fighting. An NOL hand was issued in the midst of the grass-growing season to the colonel who spent a hard week pushing a lawn-mower. The colonel returned at the end of the week, a dissatisfied customer. There was a blister on his one good hand — and a hole in the other.

It may be said to the credit and redemption of the plastics division, however, that it developed a plastic hand which was both extremely realistic and useful.

NOL plastics are developed mainly for tests conducted elsewhere in NOL. It has developed, for instance, a plastic chamber for testing rocket fuels. The chamber is strengthened by winding it with strands of plastic-dipped glass.

The process used for making the test motor actually gives the same strength possessed by a real rocket motor and is an NOL development.

FOR THE ARMY, NOL developed a plastic cartridge case which could be injection molded yet withstand the shock of firing.

NOL experimented with several mediums, including glass-reinforced plastics but found the end products either couldn't endure shock, would gum up gun barrels or were too expensive to compete with metal casings.

When it considered the possibility of injection molding, industrial laboratories were certain the process wouldn't produce a casing with the necessary properties. NOL, however, did develop a material which could be satisfactorily injection molded and save the taxpayers money in shipping costs and storage space.

The lab also devises plastic cases to keep electrical components operating despite extremes of temperature and humidity. It has studied the use of phenolic and epoxy resins and ceramics to protect metal from the extreme heat produced by rocket motors and, in several instances, it has come forward with developments which jolted industry into pursuing its own line of development.

The German *V2* rockets and changing times were two of the factors which put NOL into the aeroballistics business. After World War II, two giant wind tunnels captured by the United States Army in Germany were shipped to NOL.

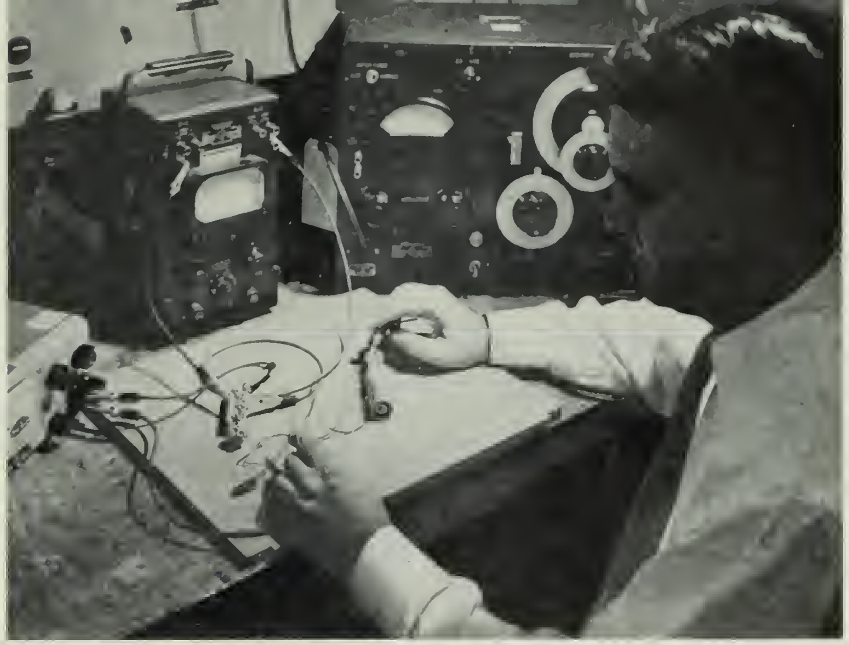
As rockets became more important to naval weaponry, a building was literally constructed around the two captured wind tunnels. The facilities among the oak trees now include supersonic wind tunnels, a centrifugal compressor plant, ballistic and hyperballistic ranges, a small hypersonic tunnel and a new, large hypersonic tunnel.

The tunnels are used to predict what a full-scale object will do aerodynamically by subjecting it to controlled conditions and then recording its actions. This technique has been applied by NOL to just about every missile in the United States arsenal.

To describe the operations of all the equipment would be beyond our scope here but let's take a look at the big hypersonic tunnel, because it is one of the largest in the country.

It can test objects designed to fly at speeds from five to ten times the speed of sound. To do this, air which is stored at high pressure is heated by gas and electric heaters to boost its temperature to 1500 degrees Fahrenheit. The air is then forced through a nickel nozzle at a pressure of 2400 pounds per square inch into the test chamber in which the model is suspended. The behavior of the model is observed by means of high-speed photographic equipment and by pressure, temperature and strain gauge instrumentation in the model.

One of the largest pieces of equipment is the hyperballistics range, which consists of an underground steel tube 1000 feet long and 10 feet in diameter, from which air can be pumped to simulate altitudes up to 150,000 feet. A passageway runs alongside to give access to observers and to provide stations for a system of extremely rapid photography which supplements the cameras in the range itself. The whole thing is buried under four feet of earth.


CHECK OUT — HASP project engineer measures pulse repetition rate of telemetering package that will go aloft in the research rocket.

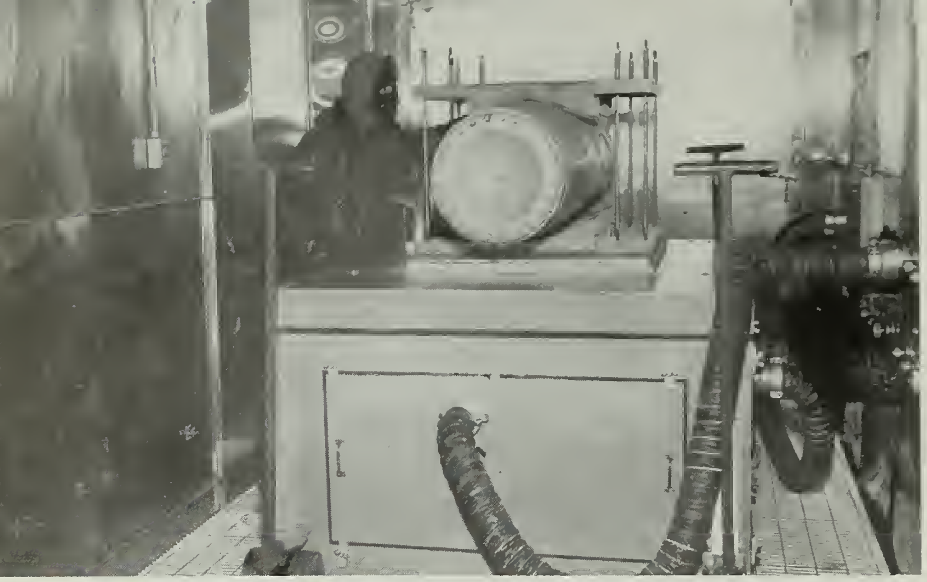
At one end of the tube, there is an 80-foot blast chamber that surrounds the muzzle of the gun which fires the model. The model missile speeds down the range and its behavior is photographed by the 22 high-speed observation stations which straddle the tube.

Missiles are forced at terrific speeds from a two-inch, two-stage, light gas gun which uses hydrogen as a propellant. The gun, which was developed at NOL, has a 40-foot, two-inch barrel. A plastic piston driven down a 30-foot cylinder by gunpowder forces hydrogen at extremely high pressure and temperature into the two-inch barrel, where it drives the test missile down range. The velocities attained are about five times the velocity produced by guns in the Fleet today.

So great is the driving force in this two-inch gun, that the breech mechanism of a 12-inch naval rifle is used to close the chamber. After the missile has flown the length of range, it hits an armorplate butt.

Weapons without explosives are of very little use to the Navy or

PIPE THIS — This pipe-like structure is the pyrotechnical tunnel where the Naval Ordnance Laboratory tests flares and other pyrotechnics.



COOL IT — Mechanical Evaluation Division of NOL gets set to test ordnance under controlled conditions of temperature and vibration.

anyone else. At NOL, explosive research is conducted in a deserted area toward the rear of the reservation. It is characterized by small, heavily constructed buildings which are partitioned by walls, two feet thick, of concrete interlaced with steel. The interior walls are punctuated by portholes filled with thick bulletproof glass, through which technicians can view the work they do by remote control.

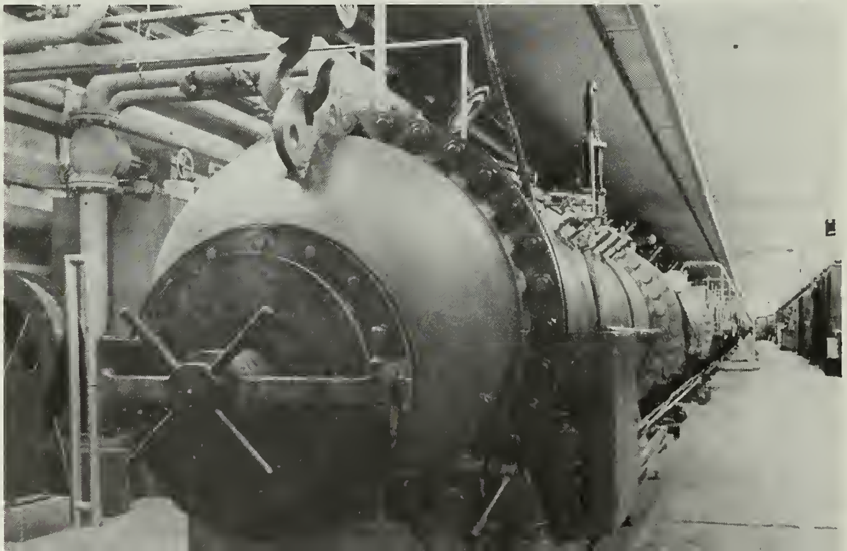
The explosives are made to the specifications of the users, which include not only the Navy but AEC. The charges are of different compositions. Sometimes they are even mixed and melted in a large airtight vat that looks quite a bit like a shipboard potato masher. The mixer currently in use replaced large vats once used for mixing candy.

There are two methods for pressing explosives into the shapes desired. One is the hydraulic press which produces a cylindrical charge. Friction makes this dangerous, and charges have exploded while being pressed. To prevent the possibility of injury, technicians watch the operations over closed-circuit television in another part of the building.

A safer and more versatile method of achieving the desired shape and size of the charge is by compressing the explosive in the isostatic press with the help of water and compressed air.

This press is nothing more nor less than the powder chamber of a former 16-inch Navy gun, pointed muzzle downward, with a breech in both ends. It is isostatic because it exerts equal pressure on all sides. The explosive is placed in a rubber mold, the breech of the gun is closed and air pumps are used to pump water to the desired pressure. The water presses the explosive into the shape dictated by the mold.

STRANGE LOOKING gear is pressurized ballistics range that fires model missiles at great speeds and photographs behavior in flight.



Various methods of obtaining molds are used. Sometimes they are machined by NOL's machine shop. Some of its more interesting molds, however, have been produced out of sheer ingenuity from such unlikely objects as rubber basketballs or volleyballs. As a matter of fact, practically anything made of rubber can be used, and such non-rubber objects as ping pong balls and bullet molds have been used.

One of the lab's more successful molds was made by taking a round glass flask of the type frequently found in chemical laboratories and painting it with several coats of latex. When the latex dried, it was peeled off the flask and filled with the desired explosive mixture.

After several tries, during which the explosives were rammed or vibrated or both, a perfectly round, seamless charge emerged from the isostatic press after the latex mold was placed in a wooden brace and pressed.

This mold replaced the volleyball mold which had previously been in use — much to the satisfaction of the explosive scientists who were getting a bit weary of buying quantities of volleyballs after having measured each one with a calibrator.

Some charges must be machined on lathes or sawed to size. This is done with regular machine lathes and by a steel cutting saw which can be operated by remote control and observed through a porthole.

NOL sometimes takes up to as long as three weeks to make one explosive charge. In a test charge, as in everything else NOL does, exactness is a must. Any deviation from specifications could well nullify the entire effort.

NOL is working on high-temperature explosives which will tolerate temperatures generated at speeds three times that of sound. It is also working on explosive binders which not only bind the explosive together, as do the currently used nylon and teflon, but will themselves release energy.

In deference to NOL's neighbors, the explosives people limit air explosives to one-pound charges. Despite precautions, an occasional noise bugs the neighbors. One air burst was noisy on its way up and produced an angry call from a neighbor who accused NOL of producing radioactive fallout. To prove her point, she brought a saucerful of the fallout to the lab. It was oak pollen.

Despite what newscasters might describe as an explosive situation, there have been no accidents during the making of explosive charges which caused an employee to lose any time from work. There have been four explosions in the hydraulic presses but, thanks to the closed-circuit TV, nobody was hurt.

THE ENVIRONMENTAL LABORATORY at NOL can be compared to a devil's advocate. Whereas most of the scientists developing ordnance approach the problem by thinking how they can make a device work or how they can improve it, the environmental scientists adopt, to a certain degree, a negative attitude. Their thoughts are directed more along the question: "What would keep this device from functioning at the proper time?"

Fundamentally, their job is to determine whether or not the weapon has the inherent ruggedness which is required of it to withstand storage under all possible conditions and whether or not it can be jostled, dropped and doused; whether it can adapt itself to the rigors of desert sand or deep-sea barnacles. If the environmental lab finds the weapon lacking in its ability to withstand its probable environment, a great deal of time and money is saved by discovering this limitation before the weapon goes into production.

To compensate for the time factor in weapon environment, the laboratory overtests for such factors as shock, vibration, temperature, humidity and pressure.

If the weapon is to be used in hot climates, it is tested at air temperatures comparable to those at which it will be stored, plus the internal heat which will be generated.

It is well to note here that the highest natural temperature recorded on land was 136 degrees Fahrenheit at Azizia, Tripolitania. Death Valley ran a close second with 134 degrees. Missile components often reach a temperature of 400 degrees Fahrenheit.

If the weapon can stand these temperatures, it is, if you'll pardon the expression, hot to trot.

On the other side of the ledger, temperatures of 90 to 100 degrees below zero have been recorded in Siberia and Antarctica.

GENERALLY SPEAKING, the environmental lab considers a range of temperatures from 160 degrees to minus 80 degrees to be realistic in testing.

Other factors to be considered in testing are the rapid temperature changes encountered in rocket flights into high altitudes.

In addition to the environmental hazards nature sets up for weapons, there are a few man makes himself. NOL wants to know, for instance, how a weapon will react when subjected to the sudden drag of a parachute or how it will behave when it is shocked by entry into water, and what will happen when it hits the bottom.

To get the desired effects, NOL fires its test objects in closed-muzzle, compressed air guns, drops them down elevator shafts on anvil-like devices and fires them into the water hazard of a nearby golf course.

To the old tests against the danger of prolonged vibration in freight cars, NOL has added new ones against the hazards of jet aircraft and missile vibrations. Techniques employing probability theory have been developed to simulate and measure this environment.

AFTER NOL HAS TESTED components and assembled prototypes, a weapon is just about ready for the Fleet. It will be tested again under actual conditions but, by now, scientists are reasonably sure the weapon they have developed will not explode before it should and will do what is expected of it when its time comes.

TESTING — *USS Norton Sound* (AVM 1) fires a *Tartar* guided missile down the Pacific during test.

STRANGE HAPPENINGS — Lightning strikes plume of water caused by underwater explosives during test conducted by NOL.

There is a reason for this confidence and a reason why NOL has operated so successfully. The youthful attitude toward obstacles which NOL men maintain has contributed to a number of breakthroughs in the development of naval ordnance.

NOL men, when faced with scientific obstacles, endeavor to adopt the attitude of Sportin' Life who, in *Porgy and Bess*, sings "It Ain't Necessarily So."

NOL scientists are important to the Navyman because they furnish him the tools of his trade.

Navymen will be interested to know they have good backing. An unusual spirit of cooperation, a freedom from harassment and a freedom of thought have combined to produce an atmosphere in which research thrives.

Navymen will also be interested to know that NOL has dealt them what interests them most after the bets are made. Namely, a winning hand made up of weapons with which a man can successfully fight.

— Robert Neil.

What's Coming Out of

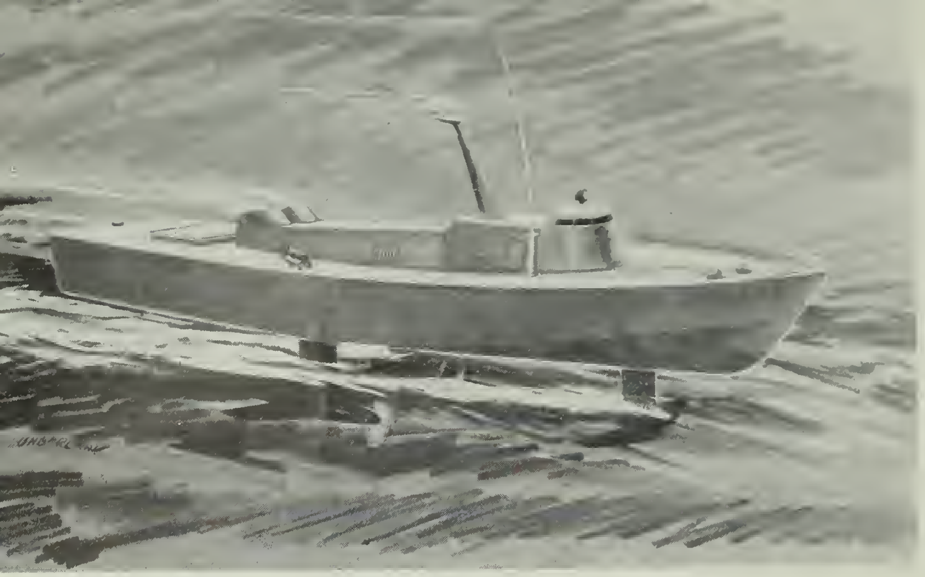
In assessing the accomplishments of the Navy, its contributions to the nation as a whole through progress in naval shipbuilding and equipment are frequently overlooked. The Bureau of Ships is a major innovator of many of these developments. Here is a progress account of recent BuShips' activities. It is excerpted from a report by Rear Admiral R. K. James, USN, *Chief of the Bureau of Ships. It's interesting to note how many of these developments have found themselves being adapted outside the Navy into the American way of life.*

THE BUREAU OF SHIPS is responsible for designing and constructing naval ships and most of the equipment on them. It sees to a ship's proper care and modernization until the Navy no longer needs it.

To be powerful enough to control the seas, our ships must be technically superior. This is largely the responsibility of BuShips and, in performing it, a number of by-products of direct interest to the general public result.

Before World War II, for example, the Navy developed a number of lightweight diesel engines for submarines. The railroads snapped up the diesels and today, railroading buffs are about the only people who ride a train with a steam engine.

To cite another example, BuShips played an important part in helping to develop radar and sonar. Now commercial ships of all sorts use sonar constantly for keeping tabs on the depth of water under their keels, and radar is commonly used for commercial ship navigation and aircraft control. The picture tube in your TV set is a direct descendent of World War II military radar scopes.



NEW TWIST — Artist's drawing shows new craft that will be used to study hydrofoil concept.

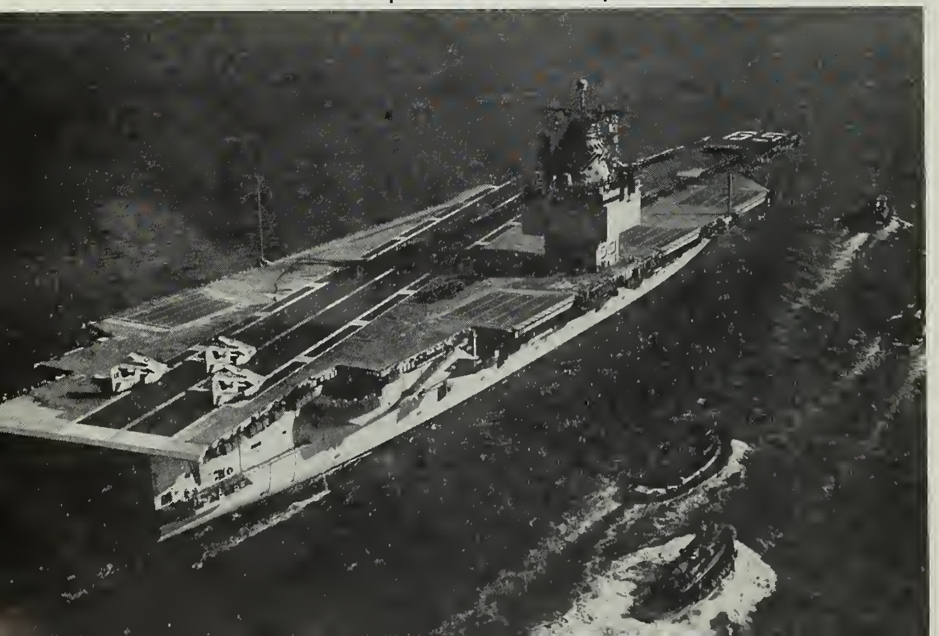
BUSHIPS HAS ALSO PUSHED BACK engineering frontiers in fields which will be of tremendous economic value in the future. A prime example is the development of nuclear power. The Navy pioneered in this field, starting shortly after 1939 when a controlled chain reaction became a practical possibility.

Within an extraordinarily short time, a land-based prototype was operating successfully, basically the plant that was to drive the world's first nuclear power ship, USS *Nautilus* (SSN 571). On her first charge of uranium fuel, *Nautilus* steamed more than 60,000 miles, over half of them fully submerged. Thus, one small charge of fuel did the job that would, in conventionally powered submarines, require enough fuel oil to fill about a mile and a half of railroad tank cars.

Since then a whole family of reactors has been developed: improved reactors for submarines; reactors especially designed for large surface ships such as the aircraft carrier *Enterprise* (CVAN 65) and the guided missile cruiser *Long Beach* (CGN 9); and a plant for the two nuclear powered frigates being built. Now under development is a single reactor propulsion plant for use in even smaller destroyer type ships.

The Navy's original interest in nuclear power stemmed largely from its advantages for submarines. Conventional submarines are really surface ships able to operate submerged for a brief time – only so long as their batteries hold out. Like batteries, nuclear reactors operate in-

UP AND ATOM—Nuclear-powered *USS Enterprise* (CVAN 65) goes to sea.



BuShips?

dependently of the atmosphere. Unlike batteries, you can use them at full power for thousands and thousands of miles of submerged sailing. That is why *Nautilus* and other nuclear powered submarines after her have been able to cruise beneath the polar ice cap.

THE NAVY IS capitalizing to the fullest on the advantages of nuclear powered submarines. Experiments were conducted until the ideal shape for underwater operations was found, and now all but the early models are shaped something like whales. This so greatly increases their submerged speeds that we put much more responsive control systems aboard these nuclear subs.

BuShips has gone to great lengths to "human engineer" these ships for the benefit of the crew during long trips when they are confined aboard with not even a sight of the sun or moon.

As much space as can be spared for study and recreation is provided. Some ships have exercise machines. One submarine is trying out an inflatable gym. The gym's padded walls protect amateur wrestlers and such from the metal projections present in any submarine compartment.

For quieter moments there is a built-in hi-fi with a speaker in each compartment. There's an individual light for each bunk, and on some subs there are earphones so a man can listen to the hi-fi without disturbing his shipmates.

BuShips is coming up with improvements to nuclear powered submarines at a terrific pace, and incorporating them as fast as possible. And it is operating on a very large scale. No less than 60 nuclear powered submarines are built, building or authorized now, including the 29 *Polaris* submarines.

The Navy's work on the reactors for these nuclear ships is of inestimable value, not only for the commercial ship propulsion systems that are bound to come, but also for land-based power sources.

A-POWERED submarines improve and grow. Here is *USS Ethan Ellen.*

THE CREW TOO—BuShips tends to improve living conditions at sea.

THE BUREAU OF SHIPS also is a leader in non-nuclear machinery developments which will in time have great impact on the economy. Take gas turbines. It is making them more rugged so they can withstand the rigors of the sea and combat.

BuShips is interested in gas turbines because they are light, relatively small, reliable and require comparatively little maintenance. The main drawback in the past has been high fuel consumption. It is embarked on a joint Army-Navy development program which is expected to result in a gas turbine engine with fuel consumption comparable to die-

FBM SAILOR plays juke box on board *USS George Washington* (SSBN 598) during patrol duty.

sel and better than gasoline engines.

The Bureau of Ships is busy with other developments: Contra-rotating direct drive steam turbines, pump jet installations as substitutes for conventional propellers, a propulsion system that operates on the ram jet principle, and others.

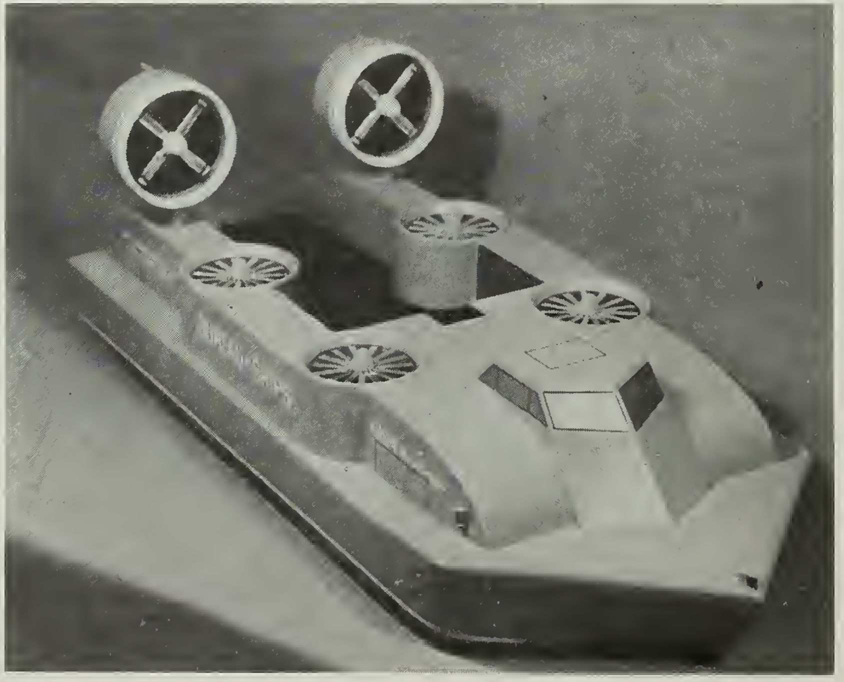
Some of the most radical engineering developments are in the electrical and electronic fields. The Bureau of Ships handles shipboard communications and this is leading to some Buck Rogers fields. Working with the Naval Research Laboratory, it has developed a communications system which involves bouncing signals off the moon. Research is going on in several projects with active and passive satellites for development of communications.

TURNING TO OTHER FIELDS of major change, it is no secret to anyone that the Navy's fleet of guided missile ships is growing rapidly. Not counting the 29 *Polaris* submarines, but counting all other missile ships, new and converted, completed and uncompleted, there are five guided missile submarines, 30 guided missile frigates — two of them nuclear powered — 12 guided missile cruisers — one of them nuclear powered — 23 guided missile destroyers and four guided missile escort vessels — a total of 74 ships.

The Bureau of Ships now has groups of specialists whose sole assignment is to study unusual proposals to see if they will be useful to the Navy. Sometimes they come up with ideas which may or may not be useful to the Navy but are definitely useful outside the Navy.

Take the "SPAR" ship that BuShip's Design Division came up with in its advance studies section. This was a concept of a ship with a draft of some 160 feet, so designed to get a sonar transducer down deep into the ocean. It might look like a thick, blunt knife pointed straight down, with only the top of the handle showing above water. This was conceived originally as an antisubmarine ship, but ships like this will actually be built for use in the field of oceanographic research.

TESTING—BuShips-inspired hydroskimmer will cruise at high speeds.



THERE ARE OTHER important radical departures. For example, now a-building is a "bug battery." Recently it was discovered that certain biological organisms act as supercatalysts in promoting electrochemical reactions heretofore considered impossible. One system under study has already produced useful amounts of power.

Two years ago the power from this cell would barely move a needle. Now we have a fuel cell that has produced watts, using the reaction of magnesium with sulphate ions in ocean water. The cost of the bug battery per watt-year should be about one-tenth the cost of any existing source of power for long endurance, low power devices.

Some of the projects are way out. For example, the Bureau of Ships has had a device operating for over a year that could use the waste products from reactor cores to convert gamma energy directly into electrical energy. It is also developing a thermionic device to convert nuclear energy directly to electricity. It is eager to see these projects succeed, for they would both provide new types of power sources with no moving parts. They look promising and they could give the economy a great boost if they were mass-produced. These are still in the research stages and may yet go up in smoke and disappointment, but they are cited as examples of the kind of imaginative engineering going on in the Bureau of Ships.

Pressing forward at such a rapid pace, some severe problems are encountered. Some are solved, but they won't ever leave BuShips alone altogether.

ONE PROBLEM is the difficulty of making these highly complex and often very delicate mechanisms reliable and rugged enough for naval use. Another is to engineer ships and their equipment so the number of men aboard can be reduced. Another is to find ways of reducing ship costs. Some of these are dismaying in their proportions. For example, the cost of an attack submarine has risen from five to six million in World War II to a total of 60 million today. BuShips tackled this problem with the dollar stretch – a program to examine everything with an eye to slashing non-essentials. It has been highly successful. Already the benefits returned total over $178,000,000.

Another problem is that of increasing surface ship speeds. This is a tough order. The conventional ship is limited by a natural barrier: The wavemaking resistance a ship driven at high speed must overcome.

One big push right now is in the area of hydrofoils and hydroskimmers. The hydrofoil is the one with stilts and subsurface wings that lift the hull clear of the water. The hydroskimmer looks as if it is riding on air. That's because it is.

BUSHIPS is carrying out a continuing investigation of all phases of hydrofoil application. The Navy already had a hefty background of experience – our own and a lot of other people's both here and abroad. It then came up with a practical system for automatically controlling the height of the hull above substantial waves. This opened the door to big strides.

Since then contracts have been let for three major hydrofoil ships. Well along toward completion is the 110-ton, 117-foot hydrofoil patrol craft—the PC(H). She will be built and equipped to conduct antisubmarine patrols in harbors, harbor approaches and coastal waters. She is expected to attain speeds of over 40 knots, so she will be able to overtake modern high-speed submarines.

BuShips also has a 15-ton experimental hydrofoil craft under contract. It will test out a variety of foil configurations by suspending them from beams between her twin hulls. Through the use of special supercavitating foils, it is anticipated she will reach speeds of 100 knots.

How big a ship can the Navy put hydrofoils on? No one knows. BuShips is pushing the limits upward with the 300-ton hydrofoil research ship for which it contracted last fall. Gas turbine power transmitted through right angled drives will lift her 219-foot aluminum hull clear of the water. She will achieve speeds of 50 knots on conventional foils. If she can stand the fantastic strains and stresses, supercavitating foils will be put on to push her up to 90 knots. BuShips is using this ship to learn all it can about open-ocean use of the hydrofoil concept and its use on still larger ships.

WORLD'S FIRST nuclear submarine, *USS Nautilus* (SSN 571), makes port.

WHAT OF THE HYDROSKIMMERS? These are craft constructed to ride on a cushion of air blown under them. They are capable of very high speeds and theoretically their efficiency increases with their size. Their load carrying capacity exceeds that of helicopters by a wide margin. They could be extremely valuable as landing craft, patrol boats, mine countermeasures craft or antisubmarine warfare ships.

The current effort along these lines is a skimmer which weighs 22 tons and is 62 feet long. It will be the largest air-cushion vehicle ever built in this country. Its four air-cushion fans will enable it to hover slightly more than two feet above water or ground. The large upright air fans at the rear will drive her forward at more than 70 knots. BuShips is going to use this craft to study the feasibility of applying the hydroskimmer principle to large naval ships.

The Navy is sure to learn a great deal in building these ships. They carry us to the brink of the state of several arts – including the arts of foil design and arrangement, gear train and bearing design, construction of extremely lightweight and strong structures and many others. Even if the basic concepts prove to have only very limited application, the lessons learned in these areas will be well worth the effort.

MORE ATOMS—*USS Long Beach* (CGN 9) travels on atomic power.

WHO'S WHO? — The Wutcheck brothers cause a bit of confusion aboard *USS Franklin D. Roosevelt* (CVA 42).

One Big Happy Family

OLD-TIMERS may recall the March 1953 cover of ALL HANDS which was graced by a photo of the Vaughn twins, Lee and Lew – or Lew and Lee, as the case may be. At the time, both were HMCs attached to the School of Hospital Administration, Bethesda, Md.

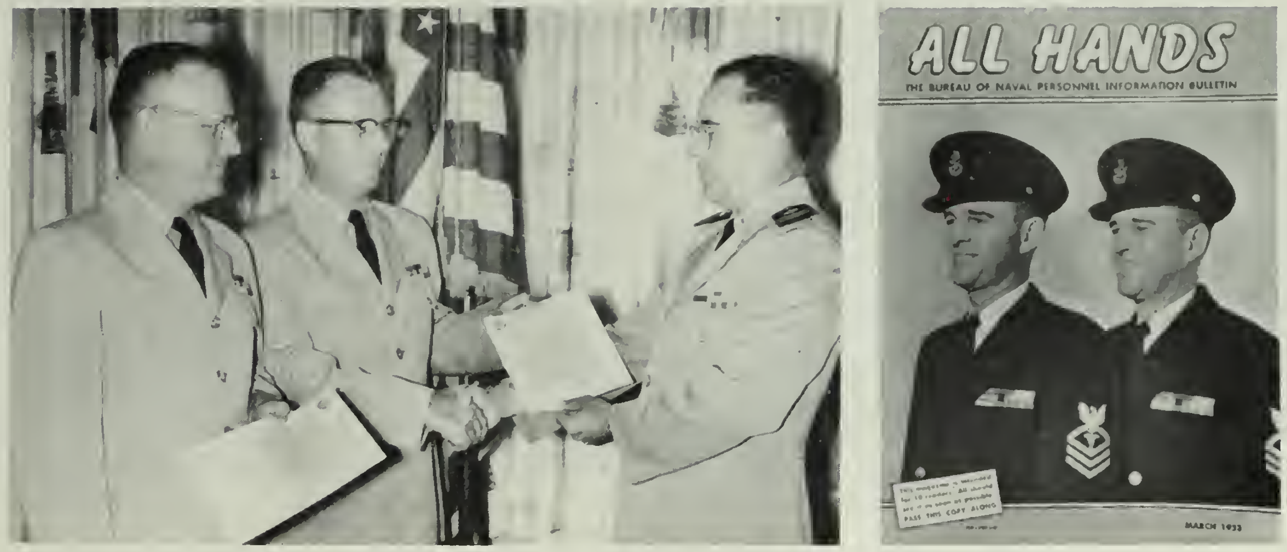
We are now pleased to offer a companion photo of the same men, taken some years later, after they achieved the more rarified status of HMCS. The occasion: the presentation of letters of appreciation from the Surgeon General shortly before their separation and transfer to the Fleet Reserve. Their duty stations and advancement throughout their naval careers followed parallel paths.

Such circumstances, while unusual, are not unique. After all, the Navy is just one great big happy family. There are probably more brothers, fathers and sons, and sister and brother combinations on duty in the Navy than in any outfit of comparable size.

We couldn't swear as to the reason but our informed guess would be that they like the Navy. Here are some case histories to support our reasoning:

- Cecil, Fred and Paul Harrison began serving together on board USS *Cone* (DD 866) in December 1958. The three brothers are all boilermen; Cecil a chief since September 1959, Fred a chief since January 1961, and Paul a PO1. The three brothers have been active in the ship's welfare and recreation program and are the nucleus of the softball team.

GREETINGS—Brothers Shadwell meet in Rota. *Rt:* Chief H. L. Foden greets son boarding *USS Whitehurst.*


ALL HANDS
THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN
PASS THIS COPY ALONG
MARCH 1953

DOUBLE CAREER — Vaughn twins receive letters of appreciation on retiring. *Rt:* The chiefs in March 1953.

- Joseph, Francis and Daniel Wutcheck, identical triplets, have been serving together on board USS *Franklin D. Roosevelt* (CVA 42). All three of the Wutcheck men enlisted in the Navy at different times. Francis was the first. He entered the service in July 1960, and was the last to arrive on board *FDR* (in April 1961). Dan joined the Navy in September 1960, and came aboard in November 1960. Joe must have liked the reports of the other two because he joined in October 1960, and was assigned to the heavy cruiser *Newport News* (CA 148) before reporting to *FDR* in March 1961.

- The oldest of four brothers comprising the Shadwell family created a family tradition in 1949 which led to the eventual naval enlistment of the entire younger generation of Shadwells.

Twelve years later, Howard, the youngest Shadwell, following in the wake of his three brothers, followed the family tradition when he entered naval service. After graduation from basic training in San Diego, Calif., Howard requested duty with his two brothers Frank and Robert, who were assigned to Naval Mobile Construction Battalion Four. The other Shadwell brother, John, is stationed aboard USS *Wexford County* (LST 1168) operating from San Diego.

(How do families get together? It's reasonably easy. Art. C-5207 of the *BuPers Manual* authorizes members of the same immediate family to request duty together, son with father, brother with brother, etc. If approved, transfer orders, at no cost to the government, will be issued to those not otherwise eligible for rotation in accordance with current directives.)

- Occasionally one hears of a father and son or two brothers serving in the Navy at the same station, but rarely do you hear of a father and son serving as CPOs in the same rating at the same station. However, NAAS Kingsville, Tex., saw such a relationship when Glen T. Longstretch, AMC, USN, saw his son, William A., promoted to AMCA.

Nineteen years ago, Chief Glen entered the Navy at San Diego.

TOGETHER — Chiefs Clow, father and son, serve at same NRTC. *Rt:* R. C. Troxel, AA, gets word from dad.

TRIO — Harrison brothers sailed in *USS Cone* (DD 866). *Rt:* Chief A. B. Fox and son are in crew of LST.

Twelve years later, Chief William also entered the Navy at San Diego. They were both stationed with VP-48 at North Island, and made two deployments together to Iwakuni, Japan. Chief William was in the Airframes Division — the division in which his father was shop chief. It was here that Chief William was promoted from third class to second and then to first.

- Chief Engineman Andrew B. Fox and his son William, ET3, are both serving aboard USS *Tioga County* (LST 1158). Chief Fox, with 17 and one-half years' service, is the oldest crew member on board. Son Bill reported on board shortly before the ship made its Aleutian cruise last year.

- Not too long ago, William M. Davis, SDCM, recruiter in charge of the Navy Recruiting Station, Jamaica, Long Island, N. Y., had the pleasure of recruiting his 19-year-old son Keith into the Navy. Keith took his qualifying examination at his father's station and his physical and secondary exam at the Armed Forces Examining Station, New York, N. Y.

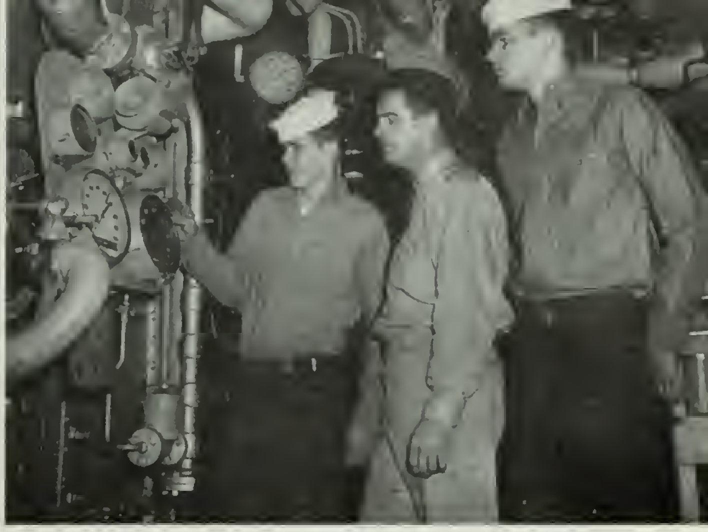
- Seniority between any two naval officers is normally clear-cut, but when it comes to the cases of LTJG Terrence V. Gallagher and LTJG Connell J. Gallagher, of Carrier Airborne Early Warning Squadron 12, the matter of seniority is not quite so clear. Brothers, both are radar controllers in the WF-2 *Tracer* flown by VAW-12. True, Terry was commissioned six months before Connie, but on the other hand, Connie is 19 months older than Terry.

- When Vincent L. Wood, AD1, reenlisted at the South Weymouth Naval Air Station, the photographer on hand to make an immortal recording of the ceremony was his brother Richard W. Wood, JO1. JO Wood is attached to the air station's command liaison office; AD Wood is busy on the VP/VR line of the station's aircraft maintenance department.

- When John W. Prendergast, MMC, retired while serving on board USS *Hartley* (DE 1029), he turned over to his two sons, Fred and Ronald, an oversize wrench, symbolic of his career.

Chief Prendergast joined *Hartley* in 1959. Earlier, he was engineering and damage control instructor at the OCS in Newport. Fred is an MM3, serving aboard USS *Van Voorhis* (DE 1028). Ronald has finished his eight

FAMILY AFFAIR — VADM C. V. Ricketts, USN, meets son at shipyard. *Rt:* Chief Oberst and son reenlist.



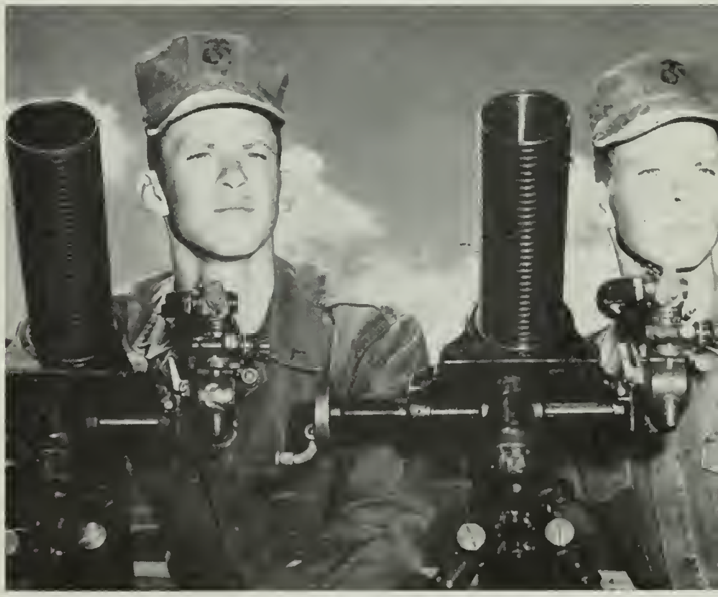
WOOD WORK — R. W. Wood, JO1, covers brother's reenlistment. *Rt:* J. R. Skelton, BTC, supervises sons.

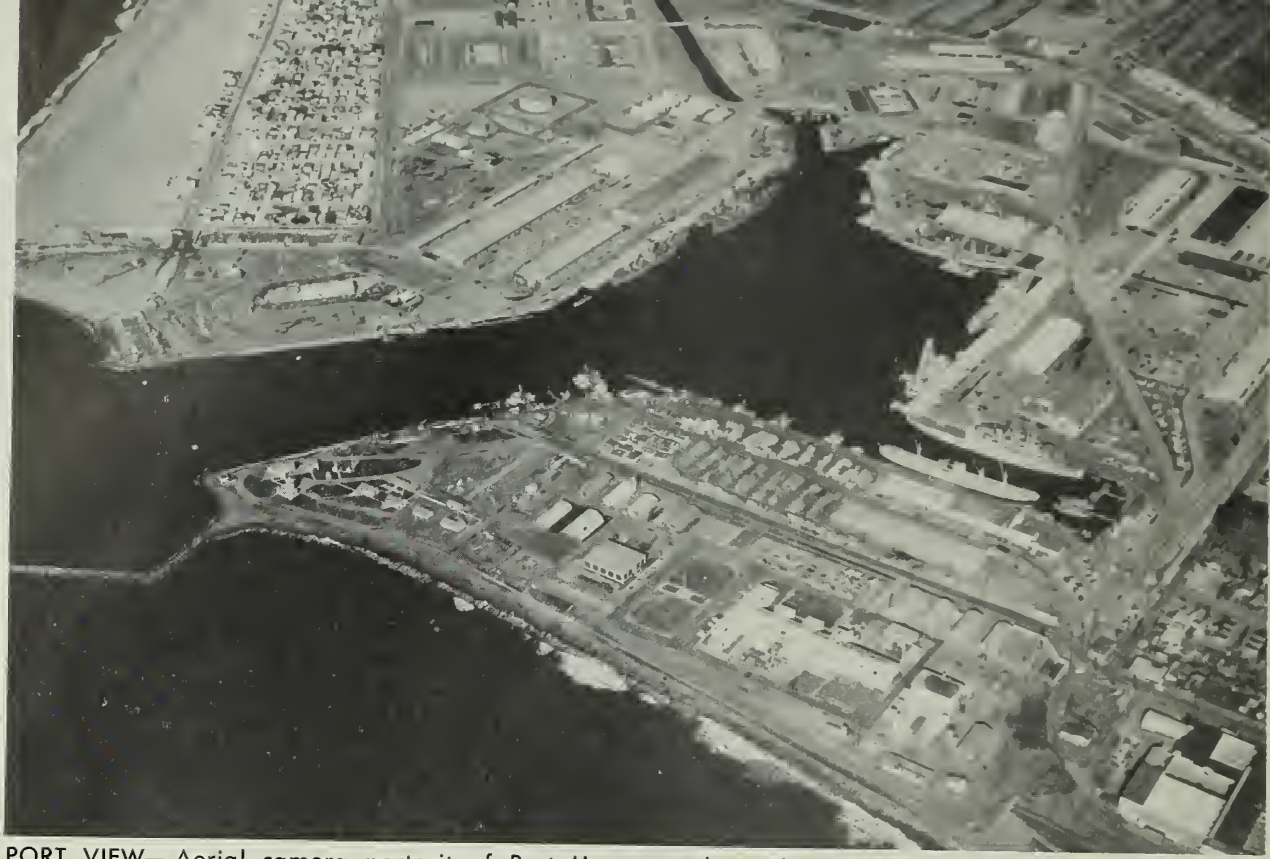
weeks of sub school at New London and has moved on to the Nuclear Propulsion school.

- At Whidbey Island, both father and son reenlisted at the same time. The reinlistments were William Oberst, ADCS, and son Alan, AQ2. Chief Oberst first entered the Navy in December 1931. He was released from active duty in 1935, and reenlisted in 1942. He has had unbroken service since that date. At present, he is working in the aircraft maintenance office. Alan first enlisted in July 1957. He is attached to Heavy Attack Squadron Six as a gunner/navigator in one of the plane crews.
- Both Harold L. Foden, BTC, and his son Charles, RD1, are serving in USS *Whitehurst* (DE 634), but they didn't come to the ship at the same time or in the same way. Chief Foden, veteran of World War II and Korea, was recalled to active duty during the Berlin crisis and reported aboard *Whitehurst* last fall. Charles, then stationed in USS *Picket* (AGR 7), heard of his father's recall to active duty and requested transfer to serve with him.
- When the word is passed for Chief Clow at the Naval Reserve Training Center at Springfield, Mass., the inevitable answer is "Which one?" Wallace G. Clow, Jr., GMC, who made chief in 1961, is a member of Surface Division 1-27, while his father Wallace G. Clow, Sr., also a GMC, is a stationkeeper at the Center.
- On board USS *Randolph* (CVS 15), keeping the job within the family is easy for James R. Skelton, BTC. His two sons, James, Jr., BT3, and Dennis, FN, have been assigned to the B division, and both come under the close supervision of their father. Chief Skelton gives them the same amount of guidance and control he gives the other men working for him, because he is well aware of the trouble that can arise from being the boss's son. But his two boys need no more supervision than the others, for they have always grown up with the voice of their leading chief in their ears..
- Marine Private First Class Wilbur H. and Timothy G. Schade are serving with the 1st Marine Brigade's I Company, 3rd Battalion, 4th Marines at Kaneohe, Hawaii. Twins, they enlisted together, took basic training together and have been side by side ever since.

And so it goes. We've barely scratched the surface, but this will provide proof that serving in the Navy is a family affair.

FAMILY STYLE — W. M. Davis, SDCM, watches son enlist. *Rt:* Schade twins serve together in the USMC.





PORT VIEW—Aerial camera portrait of Port Hueneme shows how the naval installation looks today.

Seabee's Favorite Harbor

During World War II, the little harbor of Port Hueneme, Calif., became known as one of the busiest ports in the United States.

As a clearing and staging area for thousands of tons of goods and supplies earmarked for the American war effort in the Pacific, this 105-plus acres of water was called "probably the most efficient harbor in all the world."

Even though construction adding badly-needed facilities to the waterfront was not completed until early 1944, Port Hueneme (an Indian name meaning "resting place," which seems something of a contradiction) piled up records. Incidentally, the name is pronounced "Why-nee-me."

From July 1942 through November 1945, for instance, more than 1000 ships dropped anchor in the harbor, loading almost seven million tons of material and embarking almost 176,000 servicemen.

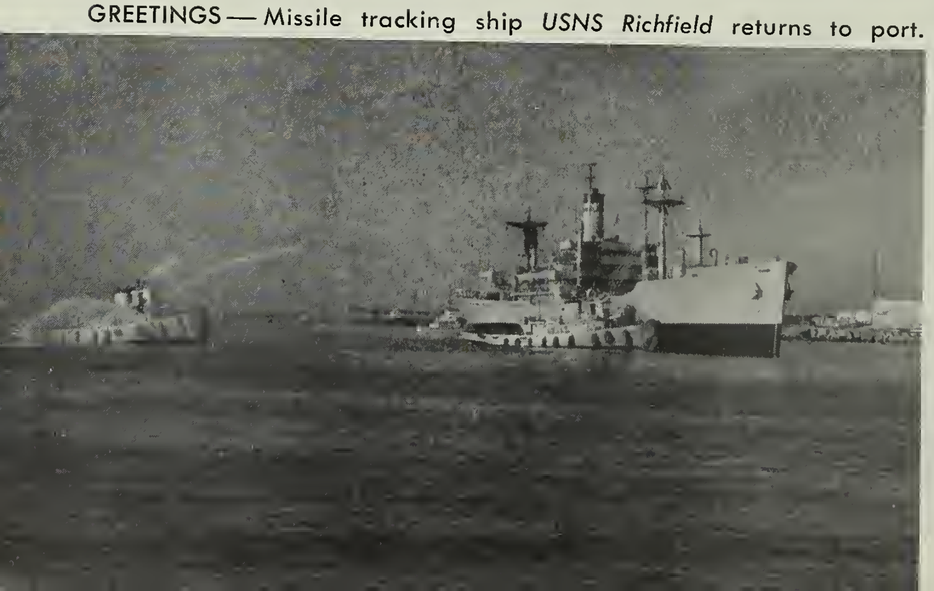
The Port Hueneme harbor originated by an odd route. Mostly man-made, it was first opened in June 1940. It was built by Ventura County farmers who were looking for a way to cut transportation costs of shipping their products.

The harbor, they thought, was the answer. It didn't work out that way, and when the government took over in March 1942, the port consisted of one wharf and one transit shed, plus the newly dredged harbor. Some $15 million and two years later, construction included wharfage, additional dredging, buildings, pavement, utilities and railroad facilities.

The month following its purchase, the Navy rounded out its harbor by establishing there an advanced base depot, since evolved into a U. S. Naval Construction Battalion. The base was developed into an assembly point, training ground and embarkation area for the Seabees. Although Port Hueneme reached its peak during World War II, it is still very much in existence.

With two of its nine deep-water

GREETINGS — Missile tracking ship *USNS Richfield* returns to port.



IN PORT — Seabee Museum is a must see at Port Hueneme. *Rt:* Ships keep things buzzing in the harbor.

berths sold, the Navy still shipped and received about 100,000 tons of gear through the harbor on board 77 ships in 1961. This doesn't include an additional 75,000 tons of equipment outloaded during Marine Corps amphibious exercises and an assortment of cargo shipped through the port to offshore island facilities.

In 1961, the harbor provided support to Antarctic stations and to Operation Deep Freeze, the first such logistic aid from the west coast. Port Hueneme was selected to save the cost of shipping some of the materials if they were to be outloaded from a west coast port. The first ship to leave the harbor as a part of this operation carried some 8400 tons of cargo that included Arctic diesel fuel, dynamite, snow and missile equipment, weasels, carryalls and sleds. The ship also carried 18,700 cases of beer.

Port Hueneme was also used for staging, outloading, embarkation and backloading as part of joint Marine Corps amphibious exercises Greenlight and Wagon Master. During these operations, some 3700 men and more than 26,000 tons of cargo were loaded on 21 ships and landing craft that arrived in the port.

In addition to transient vessels arriving to load cargo and personnel, the port is also home port for six ships and numerous small craft. One of the six, USS *Norton Sound* (AVM 1), tests prototype guided missiles and often engages in other scientific research. The remaining five are range tracking ships under operational control of the Pacific Missile Range, a few miles from the harbor.

The harbor's actual physical facilities are almost the same as in 1945, except that the two biggest wharves have been rebuilt and improved. It is protected by two breakwaters and is entered through a quarter-mile channel that leads to the central turning basin. The six major wharves make up the perimeter of the basin.

Another feature of the port is a cargo assembly area adjacent to each berth which can hold 10,000 measured tons of cargo, and two transit sheds with 30,000 square feet of space. An additional transit shed, presently being put to other uses, is available if required. Altogether, the port has a capacity to handle 330,000 measured tons of cargo a month.

With berths ranging in length from 525 to 1200 feet, the harbor can comfortably accommodate a 700-foot ship. Besides these larger berths, the harbor is fitted with two LST slips for lodging landing craft and an assortment of berths for small craft such as tugs, crash boats, picket boats, PTs and Coast Guard vessels.

— **John D. Burlage, JO2, USN.**

OUT TO SEA—*USS Norton Sound* leaves port. *Above:* CBs train at Center.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept. Washington 25, D. C.

Retirement for TARs

Sir: I would like to know if a man who has had 20 years of active duty under the TAR program is eligible for retirement pay at the time he retires or when he reaches age 65.

The man to whose case I refer has had no Regular Navy duty nor has he had any sea duty.—R.S.M., Jr., USNR.

- *There is no legislation dealing specifically with the retirement of TAR personnel. The provisions of retirement law dealing with Naval Reserve personnel apply to TAR personnel.*

Under the authority of Title 10, U. S. Code, Section 6327, an enlisted man who was a member of the Naval Reserve on 1 January 1953 may be transferred to the Retired Reserve at his own request if he has completed at least 20 years of active service in the armed forces.

His active service must have been other than active duty for training and the last 10 years must have been served in the 11-year period immediately preceding his transfer to the Retired Reserve.

Those who meet these requirements are entitled to retirement pay when they are transferred to the Retired Reserve, in the amount of 50 per cent of the basic pay to which they would be entitled if on active duty. They may also be eligible for transfer to the Fleet Reserve upon application after completion of 19 and one-half years of active duty. Fleet Reserve retainer pay is computed at the rate of two and one-half per cent of base pay for each year of active duty. — Ed.

Gold for the Non-Rated?

Sir: After studying *Uniform Regulations*, I still don't know if a seaman (or any non-rated man) is authorized to wear gold seaman and service stripes.

Gold seems to be limited to petty officers. Can any non-rated man wear it? — V. C. M., YN1, USN.

- *No, non-rated men do not wear gold service stripes or gold rating marks. This distinction is limited to petty officers.*

As you undoubtedly know, the requirements for wearing gold are 12 years of continuous service and eligibility for the Navy's Good Conduct Medal.

A man who served for 12 years and who was reduced in rating to seaman, wouldn't qualify under the good conduct requirement. — Ed.

Military Requirements Course

Sir: After reading the BuPers Instruction on the subject, I am still in the dark as to whether a graduate of a Class "A" school is required to complete his military course (Military Requirements for Petty Officers, 3 & 2) before he is allowed to take the examination for third class.

Can you give me an answer? — C. W. B., HMCM, USN.

- *The answer is yes. Even though a Navyman is an "A" School graduate, he must complete his military requirements course.* — Ed.

No Silver Chevrons

Sir: A Navyman at this command stated recently that there was, or still is, a rating badge with silver eagle, silver chevrons and silver specialty mark, which could be worn on the enlisted man's uniform in accordance with *Uniform Regulations*. I believe this to be incorrect. Can you clarify this for me?—R.W.S., SH1, USN.

- *CPOs, as you know, wear rating badges with embroidered silver eagles and specialty marks (as do other enlisted personnel who are eligible to wear the gold rating badge). However, to our knowledge, there is no rating badge with silver chevrons (embroidered or otherwise) authorized to be worn on EM uniforms. If there ever was one, we have been unable to find any record of it.*—Ed.

Ships Named for Pittsburgh

Sir: One of the articles in the January 1962 issue of All Hands stated that LSTs were not named until 1956.

This interested me because I remember an LST being displayed in 1944 at Sixth Street in Pittsburgh, Pa., which, at least for display purposes, was named *Pittsburgh*. Pittsburghites thought the ship was named for their home town.

Can you shed any light? — E.J.A., YN1, USN.

- *Not really. We can only say there have been three ships named* Pittsburgh, *none of which was an LST.*

The first was a side-wheel ironclad gunboat of Civil War vintage. The second, armored cruiser number 4, was launched in 1903 and the third was a heavy cruiser (CA 72) launched in February 1944.

We suggest that it may have been a private vessel, or perhaps a model of the cruiser which was launched in that year.

The Pittsburgh newspapers of that period would probably shed light on the subject in question. Perhaps some of our readers were there back in 1944 and can help identify it.—Ed.

Wave Fire Control Technician?

Sir: I work on the staff at Fire Control Technician School, Great Lakes. An instructor at the school says that years ago there was a Wave FT in the Navy. I haven't been able to verify this, so — could you answer the following questions for me?

Has the FT rating ever been open to Waves? Has there ever been a Wave FT? Is there any chance the rating will ever be opened to Waves again in the future?—A.M.B., SN (W), USN.

- *The FT rating has been open to enlisted women in the past, but records in this Bureau indicate that no Wave has ever held the rating.*

As for the future, FT is not now open to Waves, nor is it probable that it will be, particularly during peacetime, since the majority of the billets available are at sea.—Ed.

Typing for YN and PN

Sir: The Manual of *Qualifications for Advancement in Rating* does not list typing proficiency as a qualfying factor for advancement to YNC and PNC. Quite obviously, this means that YN1s and PN1s need no longer perform on the typewriter as a practical factor requirement. Why? — W. M. B., YNC, USN.

- *Advancement planners figure that men who've been punching typewriters for as many years as it takes to make chief have already proved their typing proficiency.*

Advancement qualifications include those already completed for a lower rating. In the case of YNs and PNs, typing ability is demonstrated while qualifying for 3rd, 2nd and 1st class. — Ed.

Reserve to Regular

Sir: I first enlisted in the Naval Reserve early in 1956 for six years. A few months later I volunteered for a two-year tour of active duty.

After recruit training, I extended my active duty for one more year in order to attend school. I then completed airman preparatory school at Norman, Okla., and an ADR Class A school, and was assigned to NAAS Kingsville, Tex., for duty.

After advancing in rate to ADR2, I applied for reenlistment into the Regular Navy, but was told that I could not do so without taking a reduction in rate to ADR3. I was further told, however, that if I would extend my active duty tour to coincide with my discharge date from the Reserve, I could then reenlist in the Regular Navy as second class.

I executed an agreement to extend, with the notation "For the purpose of reenlisting in the Regular Navy in accordance with BuPers Inst. 1130.4F" included in the agreement. Now that the time has actually come to reenlist, however, I am once again being told that I will have to take a reduction to ADR3 to go regular.

Somebody here is fouled up, that's for sure. I have now spent almost six years in what might be termed Regular Navy billets on active duty – the last three of these for the sole purpose of reenlisting in the Regular Navy. Can I, or can I not, ship regular as an ADR2? What is the authority which pertains? –R. J. B., ADR2, USNR (hopefully, and soon now, USN).

• *If all of the facts are as you state them, there's no reason for any foul-up. The pertinent authority is exactly the same as you mentioned in your letter – BuPers Inst. 1130.4F. Enclosure (2) to that instruction provides that, if you are qualified in all other respects (age, physically, etc.) you may be enlisted in the U. S. Navy in the rate held at the expiration of your current enlistment, or enlistment as extended, in the Naval Reserve.*

Have at it–and welcome to the Regular Navy. – Ed.

HIGH AND DRY — The amphibious transport dock *USS Raleigh* (LPD 1) takes shape in drydock at the New York Naval Shipyard, Brooklyn.

Antarctica Service Medal

Sir: While browsing through a back issue (August 1961) of All Hands, I noticed a listing of ships and units authorized to receive the Antarctica Service Medal. I believe this listing is not complete. How about UDT 4?–J.D.D., ENS, USN.

• *Members of Underwater Demolition Team 4 who served in* USS Mount Olympus *(AGC 8) during the period 30 Dec 1946 through 1 Mar 1947 are authorized to wear the Antarctica Service Medal. The* All Hands *listing to which you refer was based on SecNav Inst. 1650.14, which is the official directive concerning the Antarctica Service Medal. In this instruction UDT 4 isn't singled out as an eligible unit. However, the word is that UDT 4 will be added to the list of eligibles when the instruction is revised.*

Meanwhile, since entitlement to the award is established for the various units attached to an eligible ship, UDT 4 personnel who were on board Olympus *during her period of eligibility are automatically included.*

For the information of readers who aren't familiar with the award, here's a review: Navymen who have served on the Antarctic continent, or in U. S. ships or air flights operating south of latitude 60 degrees south in support of U. S. operations in Antarctica, may qualify for the Antarctica Service Medal. The period of eligibility began on 1 Jan 1946 and will end at a date still to be determined by the Secretary of Defense. No minimum time limits of participation within the qualifying period are required for eligibility.

If you spent one winter in Antarctica, you may be authorized to wear a bronze clasp with the words "Wintered Over" on the suspension ribbon of the medal. A bronze disc of $\frac{5}{16}$*-inch diameter on which an outline of the Antarctic continent is inscribed should be fastened to the bar ribbon which represents the medal.*

A gold clasp and disc are authorized for a second wintering-over period, and a silver clasp and disc for three or more wintering-over periods. Not more than one clasp or disc may be worn on the ribbon.

The medal, clasp and disc portions of the Antarctica Service Medal award are not yet available. However, the service ribbon may be purchased at your local uniform shop once your eligibility for the award has been established by your commanding officer. SecNav Inst. 1650.14, which is dated 2 May 1961, lists the ships and units which participated in expeditions below 60 degrees south since 1 Jan 1946, and gives full details on eligibility requirements. – Ed.

NO HOLD-UP—Cables from crane to bow of newly launched *Goldsborough* (DDG 20) guide the ship as it surges back in its drydock.

Shooting Down Dux

SIR: Bos'n Douglas L. Murray's letter in the March ALL HANDS—describing the visit of USS *Duxbury Bay* (AVP 38) to Basra, Iraq, as the first and only time a U. S. Navy ship has ever stopped at that port — was inspiring to all of us who have visited there previously in U. S. Navy ships.

We are proud that he is keeping up the good work commenced by USS *Greenwich Bay* (AVP 41) in August 1957. Everything the Bos'n described was certainly worthy of a "well done," especially the people-to-people activities, which are most important indeed in that area.—E. W. Pollard, CAPT, USN.

SIR: Read with interest Bos'n Murray's letter concerning the visit of *Duxbury Bay* to Basra. However, I'm afraid it was not a "first," as USS *Valcour* (AVP 55) visited there while I was serving on board in 1949-50 as a CSSN, USN.

You will no doubt receive more than a few rebuttals on this, but I just had to get my two cents' worth in too, being an old "Middle East Navyman."—W. F. Hunter, LTJG, USCG.

SIR: I would like to point out that USS *John Hood* (DD 655) visited Basra in the fall of 1957, according to my cruise book. We also visited Aden; Saudi Arabia; Karachi, Pakistan; Bahrein Island; and Massaua, Eritrea, during that trip.

Good try, *Dux* — but *Hood*, at least, was there before you. — D. Wilkey, MMC, USN.

SIR: I am sure there are not too many ports of the world which have been visited less than Basra. However, *Duxbury Bay's* claim to being the only ship to have visited there needs to be corrected.

In January or February 1957 USS *Charles H. Roan* (DD 853) visited Basra for two days. She was accompanied, as I recall, by USS *Forrest Royal* (DD 872). The late King Faisal of Iraq paid an official call on *Roan* during our stop.

Just for the record, there are precious few places in the world where a U. S. Navy destroyer has not visited.—R. F. Boorom, YN1, USN.

SIR: *Duxbury Bay's* claim to being the only U. S. Navy ship to visit Basra is in error. While serving in USS *Miller* (DD 535) we visited Basra in July 1957.—W. C. Long, QMCM, USN.

SIR: In your March issue *Duxbury Bay* claimed she was the first U. S. Navy ship to visit the port of Basra.

USS *Hank* (DD 702) stopped in Basra in September 1957. Members of the crew also made excursions to Baghdad, the ruins of the ancient city of Babylon and the city of Ur.—J. J. Johnson, EM2, USN.

SIR: I'm virtually positive this will be just one of a flood of letters you will receive in rebuttal to Bos'n Murray's claim that *Duxbury Bay* is the only U. S. Navy ship to have visited Basra.

During the winter of 1957-58 as a crew member of USS *Purdy* (DD 734), I had the pleasure of traveling up the Shatt-al-Arab to Basra, and of viewing the many sights to be seen. If I remember correctly, several other ships detached from the Sixth Fleet to independent duty with COMMIDEASTFOR did the same thing around that time.

Thus I fear, with all due respect to Bos'n Murray, that the little white *Dux* is unable to claim any first, or unique, feat in this respect.—J. D. Parmiter, LT, USNR.

SIR: In your March issue Bos'n Murray states *Duxbury Bay* is the only U. S. Navy ship ever to have visited Basra.

Much as I hate to point out the Bos'n's error, I must tell you that USS *Harlan R. Dickson* (DD 708) visited Basra in March 1958. I don't claim it as a first, however, because I'm fairly certain it was not.

We may have set some sort of precedent though. During our stop some 35 to 40 Iraqi ladies came aboard as guests of the American consul's wife and of the ship's wardroom. This was highly unusual since Iraqi women, in keeping with eastern tradition, seldom appear in public except in company with their husbands. A woman missionary from Minnesota acted as interpreter during the group's tour of our ship.

I fully agree with Bos'n Murray that Basra is an unusual and interesting port. I was wondering, too, if *Dux* had the opportunity to visit Abadan, Iran, (downriver from Basra) which was our next port of call.—D. W. Smith, LT, USN.

SIR: By the time you receive this letter you should have a basketful in answer to Bos'n Murray's erroneous claim that the city of Basra has been visited only twice by U. S. Navy ships, and that both of those visits were made by *Duxbury Bay*.

Of course, it may be that the Bos'n does not consider *Dux's* sister ship, USS *Greenwich Bay* (AVP 41) a part of the U. S. Navy, but that would be a personal, and not an official, opinion.

I was on board *Greenwich Bay* in 1960 for the regular cruise to the Persian Gulf. We left in early May and relieved *Dux* in the port of Aden in June, arriving on station at Bahrein Island about the 6th.

The trip up the Shatt-al-Arab river was one I shall always remember, since the ship had a tendency to "skid" because of the shallow water. We also had an interesting time in Basra, as we were there over the Fourth of July. Ship's company was invited to a party, the location of which is just a bit hazy in my memory now, and our skipper wanted to make sure that everyone was made aware of the nature of the date. There were not many fireworks aboard, but we took what we had, plus a locker-full of Very pistol flares, and shot them out over the garden where the party was held and toward the river. We had quite an audience for this show.

Another memorable part of our visit was the opportunity to make a trip to the ruins of Babylon. Some of us flew to the capital and then motored to the ruins — across 60 of the hottest miles I've ever traveled. It was so hot that even though I tried to hold my camera in the shade of my body, whenever the

metal touched my skin I jumped.

Anyway, having noted some of the battles that go on in the Letters to the Editor section of ALL HANDS, I have come to the conclusion that it doesn't pay to make a flat statement of fact.—J. H. Lampe, Chaplain, USNR.

SIR: *Dux* wasn't first—James W. Rafferty, SHL3, ex-USS *Wallace L. Lind* (DD 703); J. E. Prezekota, BRC, ex-USS *Harlan R. Dickson* (DD 708); CDR A. D. Dimmitt, ex-USS *Lowry* (DD 770); Neil C. Libby, YNCS, ex-USS *Lowry*; Kenneth W. Montgomery, YN2 (Ret.), ex-USS *Greenwich Bay* (AVP 41); LT H. E. Jellison, ex-USS *Purdy* (DD 734); W. A. Byron, BM3, ex-USS *John Hood* (DD 655); LCDR W. M. D. Roe, ex-USS *Valcour* (AVP 55); LT F. A. Zavattaro, ex-USS *Valcour*; LCDR R. M. Averett, ex-USS *Hank* (DD 702); C. L. Rohman, GMG1, ex-USS *Hank*; N. L. Bayne, SK2, ex-USS *Miller* (DD 535); Hollis W. Marshall, MMC, ex-USS *Miller*.

SIR: More of same – Silas W. Ogee, CSCS, ex-USS *Greenwich Bay* (AVP 41); William P. Simon, RD2, ex-USS *Forrest B. Royal* (DD 872); William E. Dewey, YN3, ex-USS *Murray* (DDE 576); R. B. Vines, BM1, ex-USS *John Hood* (DD 655); LCDR William N. Leonard, ex-USS *Valcour* (AVP 55); John G. Hochmiller, SKCS, ex-USS *Valcour*; Barney L. Price, YNC, ex-USS *Valcour*.

- *Over the years there have been many claims of "firsts" and "only" completely, irrefutably and pitilessly shot down by the readers of this magazine – but few, we feel, have been more thoroughly punctured than Bos'n Murray's unfortunate contention that* Duxbury Bay *was the first, and only, U. S. Navy ship to have visited Basra.*

As a matter of fact, since the above letters represent only a small fraction of the total number which have reached our desk since the March ALL HANDS *hit the Fleet, we have become more than a little curious as to the size of the port of Basra. It must be fairly large – else it could never have accommodated all of the Navy ships which claim to have put in there.*

In any case, Bos'n, we remain sincerely grateful to you for your contribution to the magazine, and hope you don't mind us giving eager sailors the chance to repudiate your claim in print.

You may find some solace, if you wish, in the thought that you are definitely not the first, nor will you be the last, to claim before you check.

Indeed, it is possible without too much strain to conjure up the image of a Roman sailor of a much earlier era writing a glowing letter to the editor of the Tiber Times *describing the wonders of the new port of Basra, Iraq, and claiming that his ship was the first to have visited there.*

It is possible, too, to imagine the pages of that worthy publication erupting shortly with the Latin equivalent of the raspberry, which might have gone something like this: "Where does this character Darius, Cutlassman First Class, get off – claiming his ship was the first to stand in to Basra. Why, I remember distinctly our trip there back in 36 BC, when I was (you might say under duress) acting as number four stroke oar on the starboard side. The river leading into the port was pretty shallow, as I recall, and we were all trying to fudge a bit on the sweeps, and that miserable Bos'n we had almost stripped all of the skin off our backs with the 'cat'."

It may not have happened quite that way – but then again it may have. And, having been burned ourselves on a few memorable occasions in the past, we agree with Chaplain Lampe – and have adopted the attitude that there is very, very little which occurs in this old world these days which hasn't happened before.—ED.

SIR: Looks like your magazine has quite an audience. I've been deluged with letters of late – and small wonder. On looking over my rough copy of the letter which you printed in the March 1962 ALL HANDS, I find that it read, as I intended it to, that Dux was the first and only Navy ship to visit Basra since the new government was formed in 1958. Unfortunately, through a typographical error, those words were omitted from the clean copy that I submitted to you. Hence, all the furor.

I readily admit that before this time many, many Navy ships visited Basra, but I still submit – since then, only *Duxbury Bay* has. – BOS'N Douglas L. Murray, W-1, USN.

- *We're happy to grant you equal time, Bos'n. Your explanation of what happened sounds perfectly legitimate to us, but as you can see, our large and trigger-happy audience has already aimed and fired.* – ED.

11,500-Mile Tow

SIR: A letter in your March issue (page 27), under the title "*Takelma* Tops *Takelma*," mentions a 5200-mile towing job for which USS *Takelma* (ATF 113) is supposedly in the record book. I believe that record can be topped.

I was serving in USS *ATA 190* (since named USS *Samoset*) in the early summer of 1946, when we picked up a battleship drydock section in the Philippine Islands and towed it to Norfolk, Va., via the Hawaiian Islands, San Francisco and the Panama Canal. We were always alone; no other ship assisted us in this undertaking.

I don't claim a record for my old ship, but it was a mighty long tow, and I believe *Samoset* should rate pretty high when old salts gather around to shoot the breeze about towing operations. Our skipper, LT Elmo Tweihaus, USN, deserves credit for a long, tough tow well done, if not a record.—Ernest Bergevin, BM1, USN (Ret).

- *CAPT W. J. Murphy's letter in the March issue mentioned* Takelma's *5200-mile tow merely to point out that she had performed an even longer towing job earlier – some 7000 miles from Eureka, Calif., to Leyte Gulf, P.I.*

According to the Navy Hydrographic Office, your voyage in Samoset *must have been in the neighborhood of 11,500 miles – which definitely tops* Takelma's *effort. Whether it's a record or not, we won't even speculate. If it can be topped, however, we imagine you'll be hearing about it soon.*—ED.

SWAMPED—USS *Weeks* (DD 701) plows through storm-tossed Atlantic in this photo by R. C. Evans, PH2, USN, of USS *Grand Canyon* (AD 28).

Whatever Happened to Hoe?

Sir: I would appreciate it if you could give a brief report on the history of uss *Hoe* (SS 258). – J.P.W., SFCM, usn.

• USS Hoe, *named for a dogfish shark, began life in that favorite spawning ground of submarines — Groton, Conn. — in 1942. During her war career, she made eight patrols, beginning with a sortie out of Pearl Harbor in May 1943 and ending in the South China Sea in April 1945.*

Hoe's *first taste of battle was in June 1943. Her radar picked up a convoy of three ships, the largest of which was a 6000-ton cargo vessel.* Hoe *fired three torpedoes and scored one hit. The escort vessels dropped depth charges around* Hoe *but none found its mark.*

This skirmish was followed by another in which Hoe's *target, a large transport, broke in the middle after being hit, and sank in flames.*

When Hoe *was on her second patrol west of Truk and south of Guam, she had one of her closest calls from Davy Jones.*

Hoe *had sighted two targets in the distance, one of which was a gunboat. She submerged and raised her periscope for a final bearing before firing. The skipper discovered the gunboat was headed directly toward his submarine, and the periscope framed an officer on the gunboat's deck who was pointing directly at* Hoe.

Hoe *dived. She had just passed the 220-foot mark when the first depth charge exploded near her, knocking paint and cork off the bulkheads.*

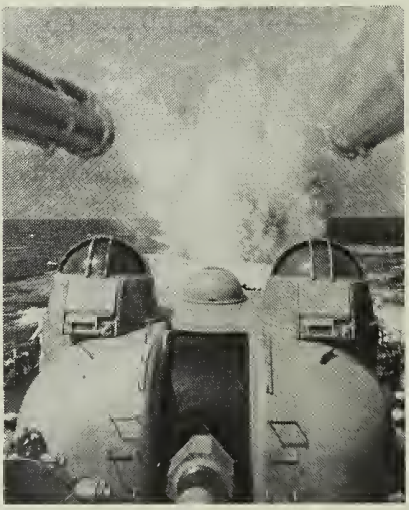
Two escort vessels joined the gunboat, dropping ashcans while Hoe's *crew simply sat and listened. For a while it looked bad, but she escaped without damage.*

Life aboard the sub, until February of 1944, was "routine" but not exactly dull. There were contacts but nothing spectacular happened.

In February, however, Hoe *sighted smoke from a convoy on the horizon, submerged and closed in. She fired her bow tubes and then her stern tubes.*

The radar men watching their scopes saw one large pip disappear from the screen. Shortly thereafter another pip disappeared. Hoe *stayed with the convoy, her skipper watching a ship in trouble through the periscope. About midnight,* Hoe *was badly shaken when the disabled ship blew up, sending a fountain of flame 2000 feet into the dark sky.*

A few days later Hoe *picked up a radar contact which proved to be a group of three tankers. The sub was sighted by one of the tankers, which started exploding depth charges around* Hoe's *hull at a rapid rate.* Hoe *stopped the tanker's depth charges with well-placed torpedos and the disabled ship started toward land which was about 15 miles away.*



SPLISH-SPLASH — A depth charge fired from a Pacific Fleet ship sends a geyser of water skyward.

At this point, an enemy destroyer lent an unwilling hand by attempting to pass what, in the darkness, it apparently mistook for the tanker's stern and collided with her bows on, causing some damage.

Hoe *administered a coup de grace to the tanker, which sank a few seconds after the torpedo hit. The surviving destroyer departed at high speed.*

Hoe *continued to harass enemy shipping in the spring of 1944. She attacked one convoy after having waited patiently for night to fall and had the bad luck to cause her first target to explode and light the entire area with a brightness that equaled daylight.*

Despite this loss of privacy, Hoe *hit at least two other ships in the convoy. One blew up and the other had black smoke pouring from its entire length. By this time* Hoe *was being heavily depth-charged and she withdrew.*

In September 1944, Hoe *returned from a 37-day patrol off the west coast of Luzon and was congratulated by Commander Seventh Fleet for destroying 15,000 tons and damaging an estimated 12,500 tons of enemy shipping.*

When Hoe *made her seventh patrol, many other submarines were having trouble finding a target. Not so,* Hoe. *She found and damaged a small tanker before she reached her patrol area in the China Sea. Later, on her eighth patrol, she launched an attack against a large tanker escorted by a destroyer. She blew up the destroyer.*

As in the course of human events, Hoe *was retired from the Fleet and placed in reserve in January 1947. She was stricken from the Navy lists in May 1960.* — Ed.

More on Rigging Records

Sir: From time to time over the last few months, All Hands has published many reports of "Rig for record" records. I refer especially to a letter from CDR. G. E. Lockee which appeared in the November 1961 issue. In this letter, he challenged competition, but more important, we think, are his definitions and his explanation of the reason why destroyers attempt to rig in record time.

As a result of that letter, we suspect uss *Bigelow* (DD 942) crew members have been bombarding you with letters. So far as we know, she has the best time of any ship for rigging.

During uss *Truckee's* (AO 147) last deployment to the U. S. Sixth Fleet, records of every ship's approach, rigging, fueling and unrigging times were maintained. On 19 Dec 1959, uss *Gai-*

nard (DD 706) used only 2.3 minutes to rig aft. This was considered outstanding. In January, however, the old records came crashing down.

On 6 Jan 1960, uss *Harlan R. Dickson* (DD 708) rigged at her forward station in two minutes flat. On 10 Jan 1960, uss *Gainard* (DD 706) lowered this time to 1.8 minutes. Later that same day, *Bigelow* rigged in 1.7 minutes forward and 2.2 minutes aft. Two days later *Bigelow* came back again and rigged forward in 1.4 minutes and aft in 1.7 minutes. *Dickson* tied *Bigelow* at 1.4 minutes at her forward station on 13 Jan 1960. The final low, however, came on 31 Jan 1960 when *Bigelow* rigged forward in 1.4 minutes (83 seconds), and aft in 1.6 minutes (97 seconds).

According to records aboard *Truckee*, six other Navy greyhounds have broken the two-minute time for rigging. They are uss *Stickell* (DDR 888), *Steinaker* (DDR 863), *Massey* (DD 778), *Bristol* (DD 857), *Charles S. Sperry* (DD 697) and *William M. Wood* (DDR 715).

Also in the November 1961 issue, you state that uss *Franklin D. Roosevelt* (CVA 42) rigged in three minutes flat. Our records show that on 19 Dec 1959, uss *Saratoga* (CVA 60) also rigged in three minutes from her forward NSFO station. On 9 Feb 1960, however, she lowered this mark to 2.8 minutes at her after station.

Saratoga was particularly alert that day. Her over-all rig times would be difficult to beat. At her aviation gas station, 3.5 minutes; at her forward NSFO station, 4.5 minutes; and at her JP5 station (two hoses connected to receive fuel), 8.5 minutes.

From an oiler's bridge and deck, it has been a pleasure to see our ships of the line display their outstanding seamanship and show their esprit de corps. We oilers are proud to serve them, as *Truckee's* motto declares: "Servimus." —Officers and Crew, uss *Truckee* (AO 147).

• *You have presented, for the record, some rigging times that will undoubtedly prompt some record searching. We wonder if other Fleet oilers can top those you have compiled. Your times have impressed us.*—Ed.

Protecting Rights of U. S.

Sir: For some time, I have served in uss Ingraham (DD 694) but I have never succeeded in finding a picture of Captain Duncan Nathaniel Ingraham, for whom the ship was named.

If there is a picture of the captain in your files, would you publish it in All Hands so we can see what he looked like?—J. E. Y., LT, usn.

• *Captain Ingraham's picture is published forthwith. The captain was born in Charleston, S. C., in 1802 and became a midshipman at the tender age of ten.*

He made his first cruise in uss Congress *and was subsequently in* Madison, Boxer, Hornet, Macedonian, Florida *and* Lexington. *He commanded* Somers, Cumberland, St. Louis *and* Richmond.

In 1837, he began a two-year term under the Board of Navy Commissioners, looking after the Navy's lighthouses, buoys and beacons.

When he was in command of St. Louis *while the vessel was in the harbor at Smyrna, in July 1853, he demanded, and obtained, the release of Martin Koszta, a former Austrian who had become an American citizen. Koszta was being held on board the Austrian brig* Hussar.

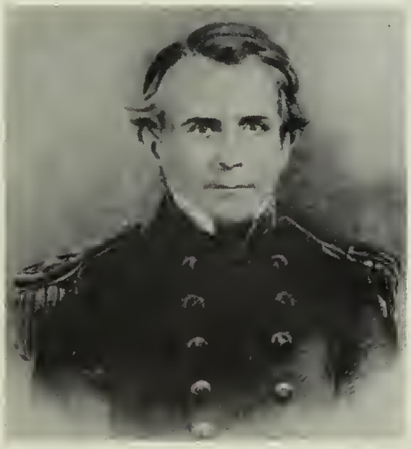
For his judicious action in the matter, Captain Ingraham was awarded a medal by Congress.

Shortly before the Civil War, Captain Ingraham was in command of uss Richmond *in the Mediterranean. Realizing his home state, South Carolina, might secede from the Union, he requested his return to the United States, and resigned from the United States Navy on 4 Feb 1861.*

During the war he served in various capacities with the navies of South Carolina and Virginia. He died at Charleston, S. C., on 16 Oct 1891.

The present Ingraham *is one of three ships the Navy has named for him. The others were DD 111 (later converted to a light minelayer) and DD 444, stricken from the Navy lists in 1942.*—Ed.

ADMIRAL George W. Anderson, Jr., usn, CNO, is decorated by Fleet Admiral Ary dos Santos Rongel, Brazilian Navy Chief of Staff.


THE NAME of Capt Duncan Nathaniel Ingraham, USN, has been carried by DDs 111, 444 and 694.

Flight Rations

Sir: On a recent annual training cruise a group of naval officers and enlisted men, passengers in a naval transport aircraft, were refused flight rations on a six-hour flight leaving shortly after the enlisted mess hall closed. The NAS Operations Officer refused to authorize issue of the rations because the men could have eaten before departure, and were ineligible for in-flight rations provided to crew members of an aircraft when flying during meal periods.

It has always been my understanding

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS MAGAZINE, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Memphis* (CL 13) — The fourth annual reunion will be held at the Heidleburg Hotel, Jackson, Miss., 27-30 August. For details, write to Sam Worth, 4019 Stilmore Rd., Cleveland 21, Ohio.
- *16th Seabees* — The 10th reunion will be held 16-19 August at the Hotel Whitcomb, San Francisco, Calif. For information write to Arnold Siita, 1246 Addison St., Berkeley 2, Calif.
- *56th Seabees*—A reunion is scheduled for 1-3 September in Odessa, Texas. For more details, write to H. C. McCulloch, 1601 East 8th St., Odessa, Texas.
- *82nd Seabees* — The 16th annual reunion will be held 7-8 September, at the Velda Rose Motel, Hot Springs, Ark. For details write to James Greenwood, 5 Main Drive, RFD #1, Box 44B, Forked River, N. J.
- *107th Seabees* — The eighth annual reunion will be held at the Belmont Plaza Hotel, New York, N. Y. over Labor Day week end. For information, write to Samuel B. Cross, P.O. Box 732, Westhampton Beach, N. Y.
- *Yeoman School, Newport, R. I.* — A reunion for those who attended during the years 1909-1919 is being planned for August. For more information, write to LT William E. Ragsdale, 2 Summer St., Newport, R. I.

that anyone working four hours or more past the evening meal is due an extra ration. The NAS Ops Officer maintained, however, that passengers in a transport aircraft, even though they were part of an organized movement of a squadron, were not working, although tools, equipment, spare parts and baggage had to be unloaded and stored upon arrival.

Please advise and cite the authority on the following questions:

1. When are enlisted men due an extra ration?

2. Are passengers in an organized movement, not on leave or liberty, considered to be in a working status en route?

3. What action can an Airlift Officer take to obtain rations for his men when he is denied them by an NAS Ops Officer?—E.A., JR.., LCDR, USN.

- *Title 10, U. S. Code, Section 6085, provides that "an aircraft flight ration chargeable to the proper Navy or Marine Corps appropriation may be furnished to members of the naval service and to civilian employees of the Department of the Navy while engaged in flight operations." The flight ration is supplementary to any ration or subsistence allowance to which the Navyman or employee is otherwise entitled. However, the flight ration may not be furnished without charge to any person in a travel status, or to any person to whom a per diem allowance is granted in place of subsistence.*

Aircraft passengers are not considered to be "engaged in flight operations" and therefore are not entitled to an extra ration. However, aircraft passengers are entitled to meals on the same basis as they are entitled to meals in the general mess.

The determination of entitlement to flight rations rests with the station operations officer. His criteria for allowing or denying such entitlement are contained in the "Bureau of Supplies and Accounts Manual," Para. 41086. In all cases, furnishing flight rations is a local command responsibility, and any action taken by the aircraft officer to obtain rations must be in accordance with local command regulations. — ED.

Naval Medical Research Billets

SIR: Does the Navy have any overseas medical installations which are devoted to the promotion of good will or research among the indigenous population? If so, in what countries are they located and how does a corpsman get duty in one of them?—B.P.B., HA, USN.

- *The Navy has no regular medical program in foreign countries exclusively for the promotion of good will, although it frequently gives medical assistance in areas stricken by disasters.*

There are a limited number of billets for hospital corpsmen in connection with research located at the Naval Medical Research Institute, NNMC, Bethesda, Md.; Naval Medical Research Units No. 1 at Berkeley, Calif.; No. 2 at Taipei, Taiwan; No. 3 at Cairo, Egypt; and No. 4 at the Naval Hospital, Great Lakes, Ill.

The hospital corpsmen at those activities who actively engage in medical research projects are usually highly specialized laboratory and/or blood bank technicians who have gained additional skills beyond those called for by their NECs of 8412 or 8417.

These billets are usually rather difficult to obtain owing to the highly specialized skills required and their limited number of billets available.—ED.

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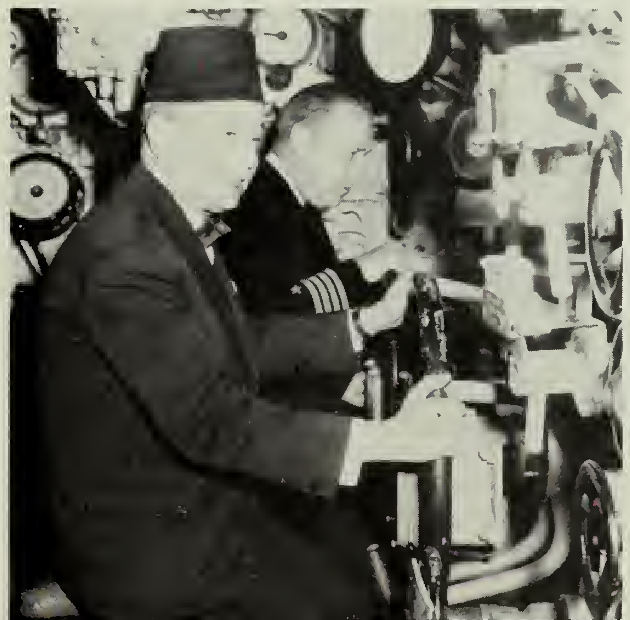
Pasha Visits Navy

HIS EXCELLENCY Abdelhamid El Alaoui, Pasha of Kenitra (Port Lyautey), Morocco, visited many of his U. S. Navy friends early this year when he toured the United States as a guest of the U. S. State Department, in response to an invitation from the Under Secretary of the Navy, the Honorable Paul B. Fay, Jr.

During his U. S. tour the Pasha visited New York City; Washington, D. C.; Annapolis, Md.; Norfolk, Va.; Charleston, S. C.; Jacksonville and Pensacola, Fla.; Dallas and Fort Worth, Texas; Phoenix, Ariz.; Thermal (near Palm Springs), Los Angeles, Point Arguello, San Francisco, and Oakland, Calif.; and Chicago.

Besides visiting members of U. S. Naval Air Reserve squadrons whom he had already entertained in his home in Morocco, the Pasha saw many other phases of U. S. Navy life. He visited naval air stations; flew in Navy helicopters; toured minecraft, destroyers and aircraft carriers; saw submarines and repair ships; and visited the U. S. Naval Academy and the U. S. Naval Training Center, Great Lakes, Ill. He saw the importance of seapower to the United States.

Clockwise from top left: (1) Pasha inspects recruit company during graduation exercises at USNTC Great Lakes. (2) Pasha greets RADM Wayne R. Loud, USN, COMMINLANT at Charleston, S. C. (3) Pasha meets W. Stilk, ADR2, at U. S. Naval Air Station, Glenview, Ill. (4) Pasha debarks from USS *Alacrity* (MSO 520) at Charleston. (5) Pasha and Captain J. L. Counihan, USN (Escort Officer), sit at controls of captured submarine in Chicago Museum of Science and Industry.



PIONEERS OF THE

SOME 20 YEARS AGO the aircraft carrier USS *Wolverine* (IX 64) was perhaps the strangest training ship afloat. She was a coal-burning, steam-driven, paddle-wheel aircraft carrier which had no catapults, no hangar deck, no elevators and no armament. This ship was little more than a hull on which a flight deck had been built.

She was, however, an important member of the U. S. Navy during World War II. She had been converted from a lake passenger ship in 1942 and could steam along at over 17 knots — fast enough to launch and land planes, provided the wind was right.

Her job was simple. She was to train naval aviators. And she did, too — thousands of them during the war years. Early in 1943 *Wolverine* was joined by a second paddle-wheel bird farm called USS *Sable* (IX 81).

Both paddle-wheelers operated in the Great Lakes and gave a tremendous boost to the training programs of the U. S. Navy throughout the war. Neither saw combat, yet their service was as important to the war effort as that of their combatant sisters. The two steamers did, in fact, free their combatant sister ships for duty in combat when they were desperately needed.

Wolverine and *Sable* are two of many ships which have been important to the U. S. Navy for reasons other than fighting battles. Some may have pioneered in a new development, or accomplished some undramatic job, but nevertheless have been significant to the U. S. Navy.

It's not possible here to describe all these ships, but we will mention some of the important ones. You may not agree with our choices, but that's your privilege.

AS A POINT OF DEPARTURE, let's go back to the very earliest days of the Navy. When George Washington took command of the Continental Army in July 1775, he needed ships to make his siege of Boston effective, and he needed ammunition and supplies. To help achieve those ends he armed a group of small ships to raid British supply ships operating near the shore.

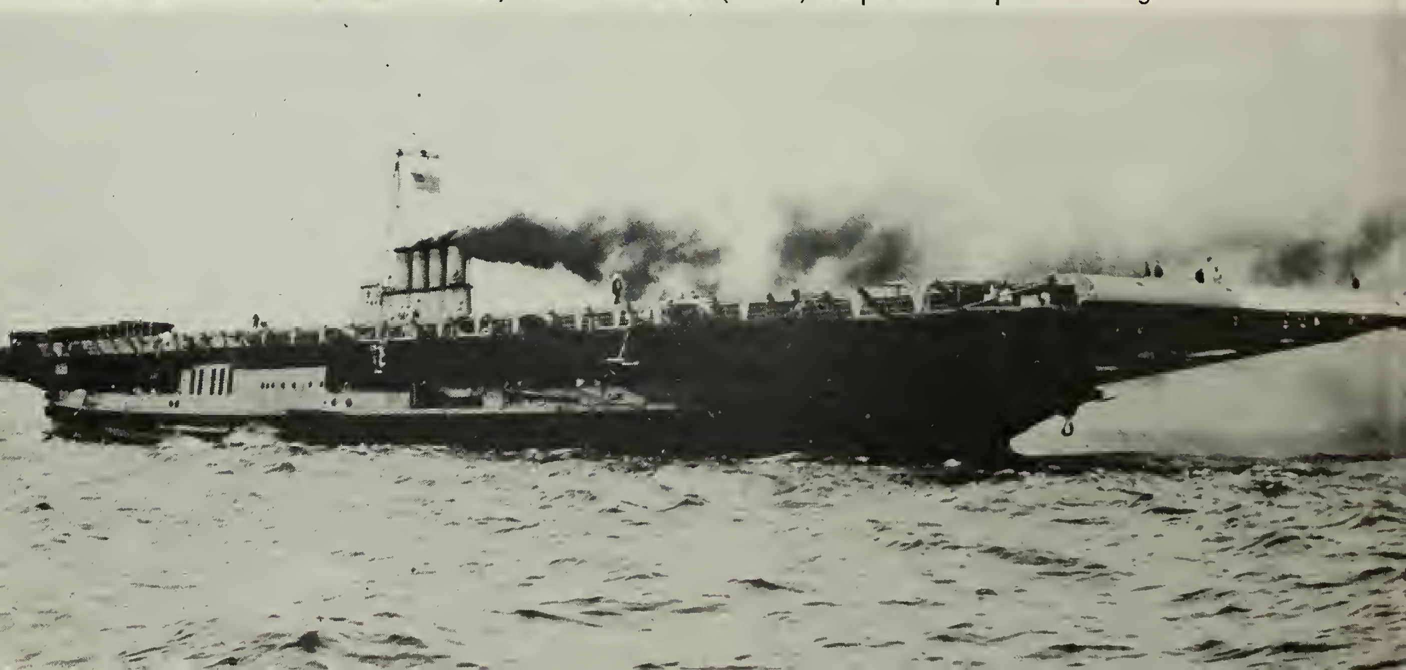
This group, known as Washington's Fleet, consisted of the schooners *Hannah, Lynch, Franklin, Lee, Harrison, Hancock* and *Warren,* and the brigantine *Washington.* Although they were not outfitted and commissioned under the Marine Committee, some historians consider this small Fleet the beginning of the U. S. Navy.

Most historians agree, however, that the original group of Navy ships came a few months later, under the Marine Committee which had evolved from the short-lived Naval Committee. These renovated merchantmen sailed as flagship *Alfred* (30 guns), *Columbus* (28 guns), *Andrew Doria* (16 guns), *Cabot* (14 guns), *Providence* (12 guns), and three smaller craft; *Hornet* (10 guns), *Wasp* (8 guns) and *Fly* (8 guns). These eight ships and others after them would hold the line against the most powerful Navy in the world — England's — until the French Alliance brought the necessary and decisive seapower to the aid of General Washington.

WAR ALONE didn't make the U. S. Navy. Who can forget, for example, that it was John Paul Jones on board *Alfred* who raised the national colors for the first time on a regular Navy ship? Although Jones was not commanding officer at the time, he was the senior officer on board when the Grand Union flag was raised.

Jones was also on hand the first time a foreign country saluted the Stars and Stripes. (An earlier version of the American flag was saluted by the Danish fortress at St. Croix, Danish West Indies, on 25 Oct 1776.) He was commanding officer of his own ship, *Ranger,* which fired a gun salute to France upon entering Quiberon Bay on 14 Feb 1778. When the French returned the sa-

ODD BALL—Paddle-wheel carrier, *USS Wolverine* (IX 64) helped train pilots during World War II.



FLEET

lute, France became the first major power to recognize the United States as an independent country.

Perhaps the brig *Reprisal* did as much to bring about this salute from France as any other ship in the United States Navy. *Reprisal,* in the fall of 1776, transported Benjamin Franklin to Paris, where he joined Arthur Lee and Silas Deane in negotiations that resulted in the alliance between France and the United States.

Some four years after this, *Alliance* took much the same trip. This time the passengers were John Laurens and his aide, Thomas Paine, who went to France to seek financial aid, arms and stores for Washington's Army. Although not successful at first, Laurens did succeed in having sent to America four transports filled with arms, supplies and stores. It was support such as this from France, together with their great battle fleet, that led to ultimate victory for the United States in the Revolutionary War.

AFTER THE REVOLUTIONARY WAR, the Continental Navy died out. With the passing of the last of its ships, *Alliance,* U. S. merchant ships were left with no protection on the high seas. Then, after many years of paying protection money to the Barbary pirates, the U. S. began to reorganize its Navy. This rebirth came, however, only after a long struggle by such Navy enthusiasts as John Adams, who is considered by some to be the "Father of the U. S. Navy."

The first ships launched for the new Navy were *United States, Constellation* and *Constitution.* These ships were great fighters, but more important, they helped give the U. S. a new start toward a Navy. Joshua Humphries took some ideas from European shipbuilders, added his own, and produced frigates like *Constitution,* a ship that could fight, take a terrific pounding and still stay afloat, or if necessary, speed away from its enemy. These abilities were well exhibited during the active years of "Old Ironsides."

Submarines, a mainstay in today's Navy, were under consideration even before *Constitution* was built. David Bushnell, back in 1776, built a craft

FIRSTS—*Alfred* was first flagship and first to fly the national colors. *Below:* Today's *USS Nautilus* (SSN 571) has rung up a long list of firsts.

FIRST HONORS—First salute to Stars and Stripes is shown in painting as a French ship returns salute to *Ranger* entering Quiberon Bay, 1778.

that was perhaps too far ahead of its time. *Turtle* (sometimes called *Marine Turtle* or *American Turtle*) was submersible, had a screw-type propeller, ballast tanks, a depth gauge, self-contained propulsion and a torpedo – equipment still found in submarines today. It was designed to sink its target by boring a hole in the hull of an enemy ship and attaching an explosive. However this craft had difficulty with copper-sheathed hulls.

ROBERT FULTON, famous for developing a steamship, also tested a four-man submarine. This one, named *Nautilus*, made several successful submerged trips, succeeded in destroying at least two ships (one in England and one in the United States), but failed to gain enough support from anyone to further its development.

Although Fulton's submarine didn't catch on, his steam-powered ships did. He designed what was to become the world's first steam-powered surface warship and even built the engine and boilers in his own machine works.

The ship, first called *Demologos* (Greek for "Voice of the People"), was launched on 29 Oct 1814. It was renamed *Fulton* when Robert Fulton suddenly died in New York on 24 Feb 1815. Captain David Porter, USN, was assigned to the war steamer and altered the original plans somewhat. She was armed with twenty-four 30-pounders and was designed to sail backward or forward. She had two massive hulls of double thickness oak and pine to make her shot-proof. The hulls were held together by gun decks below. In one hull were the two boilers, in the other a single-cylinder steam engine. Between the hulls was a paddle-wheel that was 16 feet in diameter. There were rudders at both ends of the ship and her lateen sails could be used for going either direction. Without the aid of sails, she could make over five knots, with or against the tide.

The steam frigate was delivered to the Navy at the Brooklyn Navy Yard in June 1816 but, since the war was over by then, the ship was never commissioned. She was, however, used as a receiving ship until 4 Jun 1829, when her magazine exploded. Although the cause of the explosion was never discovered, the first U. S. Navy steam ship of war and the first steam ship of war ever built, was destroyed.

A LATER STEAM-DRIVEN paddle-wheel Navy ship, USS *Sea Gull*, operated with the West Indies Squadron in the early 1820s, and is believed to be the first naval steamer to engage in warlike operations. Although she was no more than a converted ferryboat, she did continue to develop among Navymen considerable interest in steam power.

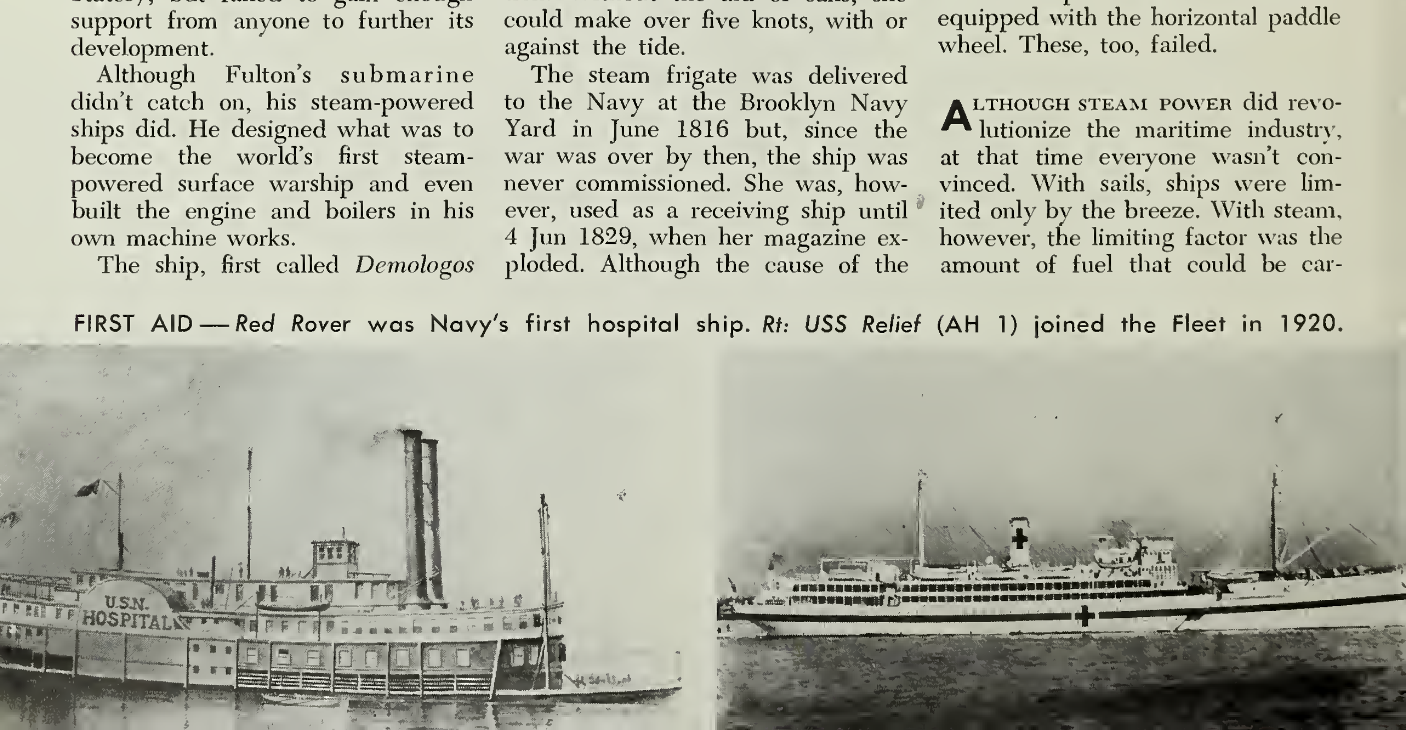
It was not until 1837 that another steam-powered ship was specifically built for the U. S. Navy. This one, also named *Fulton*, was later modified and earned a reputation as a fast ship. Within four years after *Fulton*, came the 1700-ton side-wheelers *Mississippi* and *Missouri*, the U. S. Navy's first ocean-going side-wheel steamers.

Paddle wheels and steam power created great interest, and in at least one case, overenthusiasm. LT W. W. Hunter, it seems, conceived the idea of a submerged, horizontal paddle wheel which turned in slots in the hull of a ship. He not only convinced himself that it would be superior to the vertical type paddle wheel, but he also convinced someone in authority.

As a result, USS *Union* was built. This ship could make about five knots at full throttle, and there were those who said this was only possible while going downstream. *Union* didn't convince everyone. Two smaller ships were also built and equipped with the horizontal paddle wheel. These, too, failed.

ALTHOUGH STEAM POWER did revolutionize the maritime industry, at that time everyone wasn't convinced. With sails, ships were limited only by the breeze. With steam, however, the limiting factor was the amount of fuel that could be car-

FIRST AID — *Red Rover* was Navy's first hospital ship. *Rt: USS Relief* (AH 1) joined the Fleet in 1920.



ried aboard or easily obtained. Many ships were, therefore, built with both sails and steam propulsion, as a safety measure.

Fast wooden ships with steam power and paddle wheels were a great improvement over older ships, but they were still vulnerable. The exposed paddle wheel was perhaps the best target.

With the need came the development – screw propellers. Although progress in this field had been made in England some years before, the U. S. Navy had its first screw-driven ship in 1843 – uss *Princeton. Princeton* introduced other innovations besides screw propellers to Navy ships however.

Designed by John Ericsson, *Princeton* was: The first screw-driven, steam-powered warship ever built; first U. S. Navy ship with forced draft blowers (which allowed the boilers to be placed well below the waterline and out of reach of shot); the first war steamer with a single telescopic smokestack which could be lowered below the bulwarks; and the first warship with boilers designed to burn anthracite rather than bituminous coal.

Perhaps *Princeton* is as well known for the explosion which happened on board during her trials as for the significant ship developments she introduced into the U. S. Navy. A new wrought-iron gun, the *Peacemaker* (about a 12-incher), exploded aboard when it was test fired. Several dignitaries, including the Secretary of the Navy and Secretary of State, were killed by the explosion.

Although *Princeton* was an iron-hulled ship, she was not the first in the U. S. Navy. uss *Michigan*, which was later renamed *Wolverine* (not the paddle-wheel aircraft carrier), was the U. S. Navy's first. It operated in the Great Lakes from 1844 until 1924, and wasn't stricken from the Navy lists until 1927 – 83 years after her commissioning.

STEAMED UP—Old illustration shows first steam warship, *Fulton*, launched on 29 Oct 1814. Without aid of sails she could do five knots.

PLENTY OF IDEAS have come and gone over the years. One ship which never quite made it to the building ways during the war of 1812, for example, might have been a whiz in today's space research program. It was to be built like a saucer, with propellers on the edges which could turn the ship in the water. By rotating the ship, guns aboard could be fired at targets in any direction. Perhaps this ship would have been known as the Navy's first floating turret, or maybe with a more powerful engine, the Navy's first flying saucer.

With the Civil War, as in every other war, came the need for greater improvements.. Ship's armor of iron or steel was an important innovation. This development was best demonstrated during one of the most famous naval battles of the war – between *Monitor* and the former Union ship, *Merrimac*, which was recommissioned in the Confederate Navy as css *Virginia.*

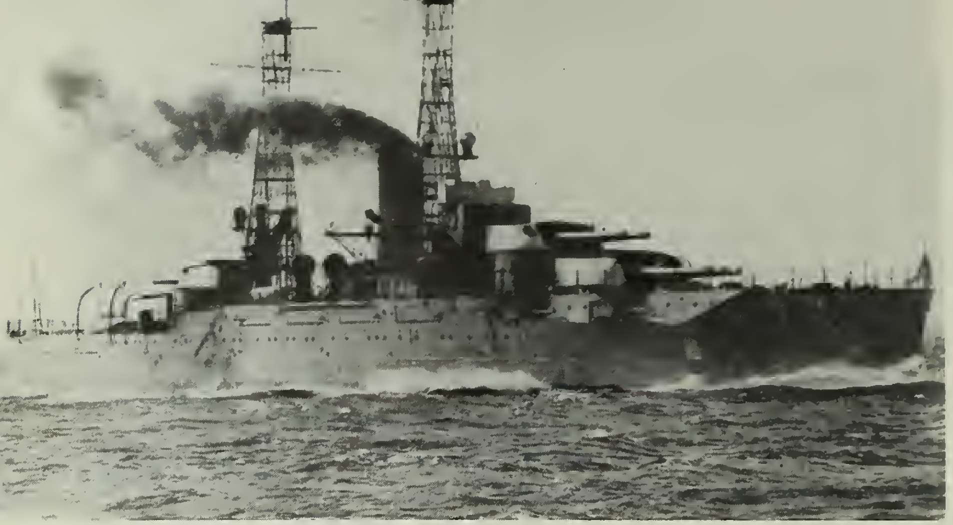
Although the battle itself was important in naval history, it is the ships which rate recognition here. Because this battle has been billed as the battle of the ironclads, many Navymen may believe both ships had iron hulls. Actually the important innovations here were armor, rather than iron hulls, and in the case of *Monitor*, a revolving gun turret.

css *Virginia* had a wooden hull which was covered with a double layer of two-inch iron plating; one layer placed horizontally and one vertically. She had about two feet of freeboard forward, less aft, and was armed with three 9-inch *Dahlgrens* and two 6-inch rifles for broadsides, in addition to two 7-inch rifled guns.

Virginia's opponent from the U. S. Navy was *Monitor*. This ship was designed and built by John Ericsson, the same man who designed and built *Princeton*, our first screw-driven, iron-hulled ship.

LIKE *Virginia, Monitor* had very little freeboard. She had so little, in fact, that during her first days she almost foundered because water came in through the openings in the deck. Whereas *Virginia* had conventional (for that period) guns in casements along the sides of the ship, *Monitor* had two 11-inch Dahlgrens placed side by side in a revolving

CARRYING ON—USS *Enterprise* (CVAN 65) depicts carrier development since first flattop, USS *Langley* (CV 1).



OILY START—One of the Navy's first two oil-burning capital ships, *USS Nevada* (BB 36), commissioned in 1916, makes way through sea.

turret. She was, to our knowledge, the first warship to have a revolving gun turret.

Monitor's hull was covered with four and one half-inch armor. With the turret sitting in the middle of the one-inch plated deck, *Monitor* did look like her familiar description – cheesebox on a raft.

The turret on *Monitor* was nine feet high and 20 feet in diameter. The sides were made of eight layers of one-inch-thick rolled iron plates. Turned by an auxiliary steam engine, the turret weighed 140 tons and was set on a spindle which extended to the keel of the ship.

John Ericsson's *Monitor* was the product of ideas he had mulled over for many years.. Only under the pressure of war was he allowed to build it.

THE SUBMARINE reappeared during the Civil War. One so-called submarine, which was not really a submersible at all, was the steam-driven *David*. It was developed by the Confederacy, and it operated with its stack and hatches above the surface of the water. It was not very successful.

The Confederate Navy did, however, pioneer in the development of submarines. The most "successful" one used by the Confederacy was named for H. L. Hunley, under whose sponsorship it was built. It was propelled by hand-cranks, had a screw-type propeller, and actually submerged. This submarine drowned several crews before it sunk itself. *Hunley* torpedoed the Union ship USS *Housatonic* on 17 Feb 1864 with an explosive at the end of a 15-foot pole. When the underwater bomb exploded, it sank the Union ship, but also destroyed *Hunley*. The submarine was later found about 200 yards from its victim, the first ship to be sunk by a sub in combat.

Besides the many destructive ships, the Civil War also produced the U. S. Navy's first hospital ship, USS *Red Rover*. It accompanied Admiral David Porter's Mississippi Squadron from 1862 to 1865, and was the first Navy ship to carry women nurses. (USS *Relief*, AH 1, commissioned in December 1920, was the first U. S. Navy hospital ship to be designed and constructed solely as a hospital ship.)

ONE OF THE MOST DRAMATIC changes in U. S. Navy ships came in 1867 with USS *Wampanoag*. A fast, screw-driven wooden ship, she was propelled with steam machinery designed by Benjamin Franklin Isherwood. She distinguished herself as a speedy ocean cruiser in a run from New York to Savannah, when she exceeded by two knots the speed of the fastest ocean liners of any nation at that time – all this in a mid-winter gale.

Wampanoag's propulsion gear was remarkable for that period. Isherwood coupled slow-moving machinery with a fast-moving propulsion gear. The ship had a vast appetite for fuel, she had little room for armament and she was so long (335 feet on load water line) in proportion to her depth, that she found it difficult to endure rough seas. These shortcomings outweighed the advances and *Wampanoag* never quite made the big time.

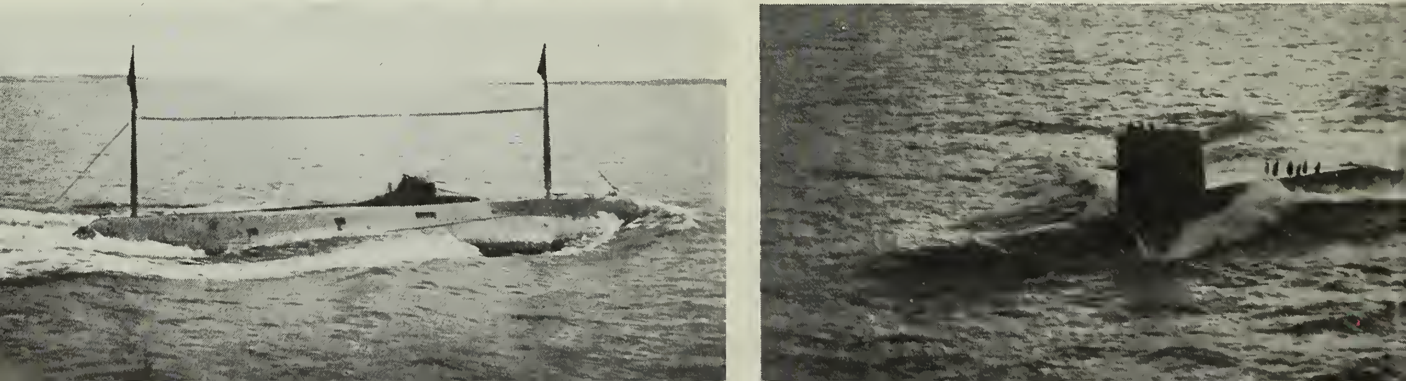
FOR A TIME, in the last decades of the 19th century, the spotlight on the Navy dimmed, but it brightened again, partly under the influence of Captain Alfred T. Mahan's writings.

Isherwood had also continued to fight for ship improvements, especially iron hulls and steam propulsion. In 1883, the steam- and sail-powered cruisers *Atlanta, Boston* and *Chicago* and the dispatch ship *Dolphin*, all with steel hulls, were authorized. At the same time Congress limited the amount of money which could be spent on repairs to wooden ships, thereby nudging them toward their graves.

In 1895 the Navy's first battleship, USS *Texas*, was commissioned. Thus the day of the heavily armed and heavily armored ships had arrived. Following *Texas*, three other battleships were built. They displaced some 10,000 tons, had 18-inch armor and had 13-inch guns.

Perhaps the most famous battleship of this era, however, was USS *Maine*. She was in Cuba just before

HISTORY BELOW—*USS Holland* readies for dive. *Rt: USS George Washington* (SSBN 598) was first *Polaris* sub.



the Spanish-American War, to protect American lives and property, when she suddenly exploded, killing 260 crew members.

By the end of the 19th century, battleships were the mainstay of the U. S. Fleet. Before the turn of the century, battleships displaced about 12,000 tons. By the early 1930's, BBs had grown to more than 30,000 tons. England pioneered in the development of larger and more heavily armed battleships, but other countries, including the United States, soon joined the race for bigger and better battleships.

CRUISERS AND DESTROYERS came into use during the early years of the 20th century. Although some other countries began using an increased number of cruisers, the United States, for the most part, remained true to battleships.

The United States Navy's first destroyer was USS *Bainbridge*, torpedo boat destroyer number one. In 1900, destroyers such as *Dale* (DD 4), *Decatur* (DD 5), *Lawrence* (DD 8), *Paul Jones* (DD 10) and *Perry* (DD 11) were launched. They displaced a little over 400 tons and could make nearly 30 knots.

Also in 1900, the U. S. Navy's first submarine, USS *Holland* (SS 1), was commissioned. It was 54 feet long, displaced 74 tons while submerged, and had a screw-type propeller. She was driven by a gasoline engine while surfaced and by batteries while submerged.

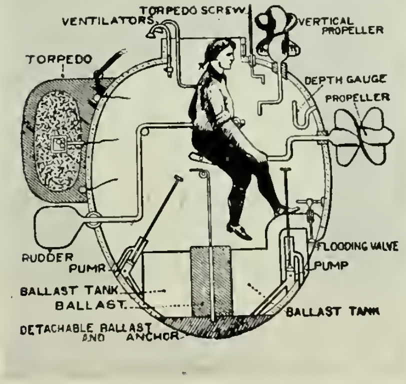
Holland's surface speed was about seven knots, and at full throttle she could make about the same speed while submerged. *Holland* was so successful that the United States ordered several others like her. The United States had nearly 50 submarines – they had now grown to 700 tons or more – by 1914. This was a few more than Germany had on the eve of World War I.

IN THE EARLY DAYS of the 20th century the United States put together one of the most famous groups in Navy history—the Great White Fleet. Admiral Robley D. "Fighting Bob" Evans commanded this famous fleet of 16 white battleships when it left Hampton Roads, Va., on its historic "show of the flag" cruise. Later, both RADM. C. M. Thomas, USN, and RADM C. S. Sperry, USN, commanded the fleet of battlewagons, which included: USS *Connecticut* (BB 18), *Kansas* (BB 21), *Vermont* (BB 20), *Louisiana* (BB 19), *Georgia* (BB 15), *New Jersey* (BB 16), *Rhode Island* (BB 17), *Virginia* (BB 13), *Minnesota* (BB 22), *Ohio* (BB 12), *Missouri* (BB 11), *Maine* (BB 10), *Alabama* (BB 8), *Illinois* (BB 7), *Kearsage* (BB 5), and *Kentucky* (BB 6). (At San Francisco, after the first leg of the trip, *Maine* and *Alabama* were replaced by USS *Nebraska* (BB 14) and *Wisconsin* (BB 9).

SIGNIFICANT FLEET—Ships of Great White Fleet leave San Francisco for Honolulu in 1908 to continue their round-the-world cruise.

The fleet of white ships left Hampton Roads in December 1907, and sailed around South America to San Francisco. From there they visited Honolulu, New Zealand, Australia, Manila and Japan, and then returned home via China, the Indian Ocean and the Mediterranean. In February 1909 the fleet steamed back into Hampton Roads.

AT ALMOST THIS SAME TIME in history, the Navy was beginning an era which brings ship propulsion right up to date. In January 1909 USS *Cheyenne* (formerly USS *Wyoming*) tested oil as fuel for large ships. Her tests along the California coast were quite successful. In 1912 the U. S. Navy's first two oil-burning capital ships, USS *Nevada* (BB 36) and *Oklahoma* (BB 37), were laid down. They were commissioned in 1916.



Bushnell's *Turtle* — 1776

Oil had been tested in smaller ships well before the tests in *Cheyenne*. USS *Palos*, a tug in the Boston Navy Yard, was apparently the first U. S. Navy ship to test this type of fuel. As a coal burner, *Palos* did eight knots – with oil she did over 14. It was this highly successful test that led to the further testing of oil in *Cheyenne* and the building of *Nevada* and *Oklahoma*.

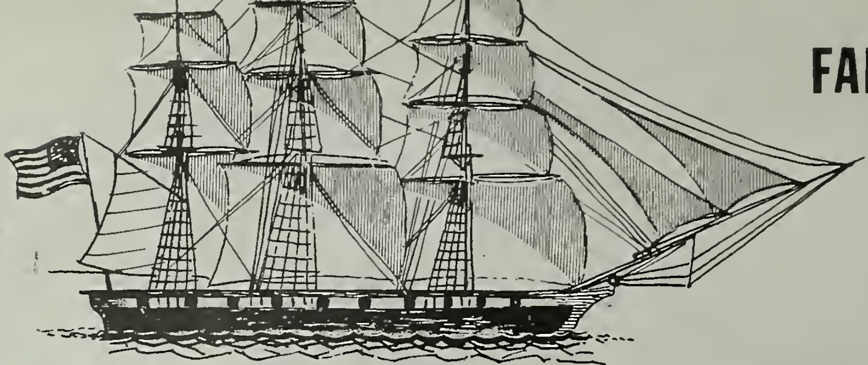
Ships of this period were thirsty, and didn't have the fuel capacity for extended cruises. If smaller oil-burning ships were to cruise the oceans, they must be refueled en route. To help meet this need, USS *Maumee* (AO 2) refueled a ship at sea in April 1917. This was apparently the first time oil had been passed between ships at sea. Incidentally, *Maumee's* exec and engineering officer was a young man named Chester W. Nimitz.

During World War I the Navy needed and built many destroyers to counteract the increased threat of German submarines.

FOLLOWING WORLD WAR I, the size and numbers of ships were regulated by the Washington Treaty of 1921. One provision stipulated that no capital ship would be built for 10 years. This stagnant period slowed

(Continued on page 34)

FAMOUS NAVAL BATTLES



INTRODUCTION—Since the birth c
engaged in many notable battles—in
age worthy of pride. This compilati
many actions which contributed to
modern era wil

RAID ON NEW PROVIDENCE, 1776—Although the raid on New Providence didn't develop into a big battle, it was significant because it was the first amphibious operation carried on by American Navymen and Marines. The objective, which was accomplished, was to take possession of much-needed gunpowder.

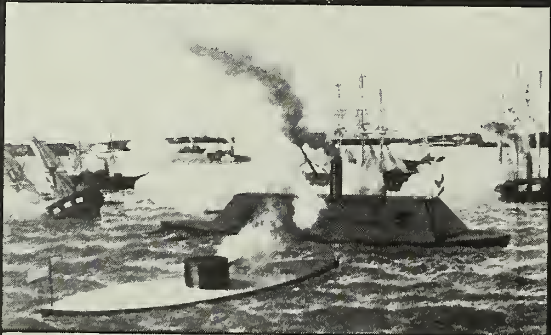
BONHOMME RICHARD vs SERAPIS, 1779—The American ship **Bonhomme Richard** was "14 years old, rotten, unhandy and slow," mounting only 42 guns against the 50 guns of the British ship **Serapis.** Although the British had the superior ship, John Paul Jones led his crew to victory with the cry, "I have not yet begun to fight."

CONSTELLATION v
notable events of the
ture of **Insurgente** b
engagement lasted c
had 70 men killed or
Constellation.

CONSTITUTION vs GUERRIERE, 1812—The first decisive naval action of the War of 1812 was a great morale builder for the Navy and the nation. **'Old Ironsides'** quickly proved her superiority in a broadside-to-broadside duel, and within 20 minutes of the opening shots, **Guerriere** was a beaten ship.

UNITED STATES vs MACEDONIAN, 1812—Another morale booster in a war that often went badly for us elsewhere was the duel between the 44-gun **United States,** under Stephen Decatur, and the 38-gun **Macedonian.** American losses included only 12 killed or wounded, while the British suffered 105 casualties.

LAKE ERIE, 1813—In t
Commodore Oliver H
weight of fleet broads
range. After three ho
Perry won, and the B
doomed.



MONITOR vs MERRIMAC, 1862—The fight between these ironclads marked the first time two armored vessels met in combat. Although the battle ended in a draw, few episodes in naval history were more dramatic. The engagement lasted about four hours, with the ships practically touching one another at times.

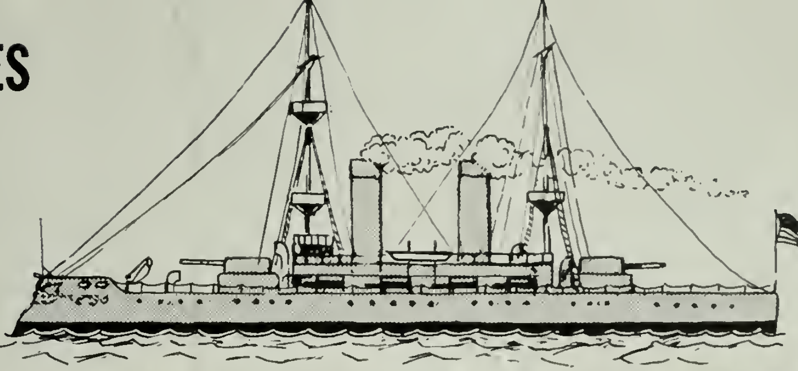
KEARSARGE vs ALABAMA, 1864—The Confederate raider **Alabama,** in a cruise of 11 months, established a record in the capture of Union commerce. As a result, she was a "much sought after" ship. Located in Cherbourg, France, by the Union sloop-of-war **Kearsarge,** her exploits were ended as she went down in defeat.

BATTLE OF MOBILE
Mobile Bay that Adm
pedoes" a part of N
the ironclad ram **Tenn**
powerful ship, met de
attack on Farragut's

Prepared by All Hands Magazine

the 18th and 19th CENTURIES

nation American ships and sailors have
they gave the Navy and the nation a herit-
hough limited to 15 battles, represents the
eritage in the Navy's first 125 years. The
overed in a later issue.



GENTE, 1799—One of the most
War with France was the cap-
J.S. Frigate **Constellation.** The
hour, during which the French
d compared with only three for

CONSTELLATION vs VENGEANCE, 1800—**Constellation** again distinguished herself in this spectacular five-hour night engagement against a much more heavily gunned French frigate. In this action, as in the fight with **Insurgente, Constellation**'s training and organization made the difference.

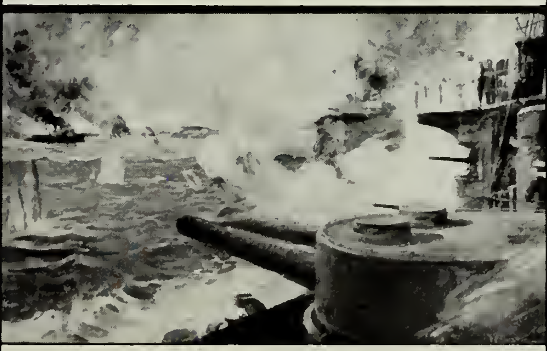
TRIPOLI, 1804 Our young Navy fought the pirates of Tripoli for years. In this action, led by Stephen Decatur, the Americans captured three enemy craft. Afterwards, the Tripolitans, who were also noted for their skill at boarding and hand-to-hand fighting, never let the Americans get within boarding distance.

le the American forces, under
Perry, had the advantage in
t the British guns had longer
15 minutes of fierce fighting,
osition around Lake Erie was

LAKE CHAMPLAIN, 1814—Lake Champlain was of great strategic importance, since it meant a jumping-off place for a British invasion that could have altered the present-day U.S.-Canadian border. After months of preparation the two fleets clashed in a two-hour-and-15-minute battle which the U.S. Navy won.

VERA CRUZ, 1847—Of the few naval engagements fought during the War with Mexico, the Battle of Vera Cruz was the most significant. It was a well organized and executed joint Army-Navy amphibious operation in which the Navy landed some 12,000 troops, plus equipment, horses and artillery.

1864—It was in the Battle of
rragut made "Damn the tor-
dition. It was here too that
the Confederate Navy's most
hile staging a single-handed



BATTLE OF MANILA BAY, 1898—Admiral Dewey's audacious attack on the Spanish fleet at Manila Bay caught the defending ships and shore batteries so unprepared that the battle was won in a "most astonishingly decisive manner." In the process, the United States won new respect as a naval power.

BATTLE OF SANTIAGO, 1898—As in the Battle of Manila Bay, the Spaniards were facing a superior force and were badly beaten. The one-sidedness of the victory was reflected in the casualties. American losses were only one man killed and one wounded, compared to 474 casualties for the Spaniards.

(Continued from page 31)

technical advancement in ship construction for a time.

The last so-called treaty ship was USS *West Virginia* (BB 48), which was commissioned in 1923. The new breed of battleship, typified by USS *North Carolina* (BB 52), which was built just before and during World War II, was faster, more powerful and better protected.

Perhaps the most significant ship to be born in the youthful 20th century was the aircraft carrier. The first one, USS *Langley* (CV 1), displaced about 20,000 tons, and was not much of an aircraft carrier compared to our modern supercarriers. It was a beginning, however. Following *Langley* were the carriers USS *Lexington* (CV 2) and *Saratoga* (CV 3), which were built on battle cruiser hulls.

Actually, *Langley* was the culmination of something that had started back before the beginning of World War I. Eugene Ely took off in a plane from an improvised wooden platform built on the forecastle of USS *Birmingham* (CL 2). This flight, the first from a ship, was perhaps the real beginning of flattops.

ONE OF THE MOST IMPORTANT pieces of equipment, which was to blossom during World War II, was radar. It was not, however, a product of the war. The first shipboard radar equipment of the U. S. Navy was aboard the old four-stacker USS *Leary* (DD 158) back in 1937. From this first piece of shipboard equipment developed radar as we have it today.

The war also brought up to date one of the oldest and perhaps the most difficult types of warfare, the amphibious assault. A leading ship credited with making this type of warfare successful in World War II was the LST (tank landing ship). This rather slow, ugly-looking ship almost went from drawing board to combat within the space of a year. There was little time for testing. The first LST commissioned in the U. S. Navy, LST 383, was delivered in 1942, some five months after the contract was let. Before the end of the war hundreds more were built and used.

DEEDS AS WELL AS developments win wars. USS *Hornet* (CV 8), in 1942, performed a mission of great importance to morale early in the war. She carried Brigadier General Jimmy Doolittle and his raiders within striking distance of Tokyo. It was from this aircraft carrier that the United States was able to strike at the very heart of the Japanese empire — a feat which the Japanese thought almost impossible. The U. S. Navy knew better.

ON DECK—FADM Nimitz, USN, and General of the Army MacArthur, USA, walk deck of *USS Missouri* (BB 63) before Japanese surrender.

USS *Growler* (SS 215) was another ship that will be noted in every history of World War II. This is the submarine which CDR Howard W. Gilmore, USN, commanded when he gave his immortal "Take her down" order. Regardless of what *Growler* did before or after this incident, she will always be known as the submarine from which CDR Gilmore was lost.

World War II started for the United States with the attack on the Navy at Pearl Harbor. The Navy was also present for the ending of the war. On 2 Sep 1945, on board the battleship USS *Missouri* (BB 63) lying in Tokyo Bay, representatives of the Japanese government signed an unconditional surrender.

War, even though a tragedy, does have its lighter moments interspersed with seriousness. The story is told of USS *Guardfish* (SS 217), for example, which was so close to the enemy's shore during World War II that the crew watched a horse race at a Japanese seaside race track through the periscope. The crew apparently made a few side bets (friendly of course), and were slightly annoyed when they couldn't get the results of the race. *Guardfish* is also one of two submarines to win a pair of individual Presidential Unit Citations. USS *Tang* (SS 306) is the other. USS *Pigeon* (ASR 6) is the only surface ship to win two such individual awards.

THE NAVY TODAY is hardly the Navy we knew as few as 15 years ago. Following other wars, the U. S. Navy had been cut back several times to almost nothing. Following World War II, however, development of the Navy continued, perhaps not in greater numbers, but in technically superior ships and equipment.

In the beginning, for example, aircraft carriers had straight decks, and about the only improvement during the war years was longer or wider flight decks. USS *Antietam* (CVS 36), however, changed all this. She introduced the angled deck (a British development) to the U. S. Navy. It was an extremely important improvement: for the first time planes could be launched and retrieved simultaneously.

Following the conversion of *Antietam*, every large aircraft carrier in the Fleet was equipped with an angled deck. When the first of the so-called super carriers, USS *Forrestal* (CVA 59), came into existence in 1955), it was, of course, equipped with this type of deck, as well as many other innovations to make flying from a floating airstrip safer. One of the more important was the mirror landing system, another British invention introduced into the U. S. Navy by USS *Bennington* (CVA 20).

For the U. S. Navy, 1955 was a great year. USS *Nautilus* (SSN 571) the world's first nuclear-powered submarine was completed; USS *Boston* (CAG 1), our first guided missile cruiser was completed; and USS *Gyatt* (DDG 1) was converted from DD to guided missile destroyer. These ships were the forerunners of many others already commissioned, on the building ways or on the drawing boards..

THE PERIOD SINCE World War II has also been fertile for other ship types. Here are some examples: USS *Norton Sound* (AVM 1), the Navy's first guided missile and experimental test ship, was placed in service in 1948. USS *Northampton* (CC 1), the first, and so far the only, command ship arrived in 1953. USS *Mississippi* (AG 128), the BB converted to an experimental guided missile ship, introduced the *Terrier* missile in Fleet maneuvers in 1954; USS *Dewey* (DLG 14), completed in 1959, was our first guided missile frigate. Among amphibious assault ships (the first ones were converted from aircraft carriers), was USS *Iwo Jima* (LPH 2), commissioned in 1961, the first designed and constructed as an LPH. USS *Long Beach* (CGN 9), commissioned in September 1961 became our first nuclear-powered cruiser. USS *Enterprise* (CVAN 65), commissioned on 25 Nov 1961, is our first nuclear-powered aircraft carrier. Our first Fleet ballistic missile submarine, USS *George Washington* (SSBN 598), was commissioned in December 1959. Our first nuclear-powered frigate, USS *Bainbridge* (DLGN 25), was launched on 15 Apr 1961. USS *Proteus* (AS 19), is our first Fleet ballistic missile submarine tender. (*Proteus* is converted, but USS *Hunley*, AS 31, launched in September 1961, is our first newly-constructed Fleet ballistic missile submarine tender.)

There have been other new types since WW II, but the above seem to be among the most significant.

FORERUNNER—Among Navy firsts in 1955 was the converted *USS Gyatt* (DDG 1), the first of a line of DDs to take guided missiles to sea.

Before the typewriter cools the above list will be outdated. Research and development never stops. Hydrofoil and hydroskimmer craft, for example, are under continual study. The U. S. Navy's first operational hydrofoil type is already under construction and is scheduled to be launched in June 1962. As with the hydrofoil, a number of hydroskimmer research craft have also been built. These ships could bring about the biggest and most dramatic change in ship configuration ever.

Accomplishments of Navy ships in recent years have also been noteworthy. USS *Nautilus* became the first ships to go under the North Pole and was the first ship to go from ocean to ocean by way of the North Pole; USS *Triton* (SSN 586), became the first ship to go around the world submerged; and USS *George Washington* (SSBN 598) is the first ship to fire a *Polaris* missile while submerged. Records are being made daily and being broken almost as fast. There is no end to progress.

We have discussed ships in this article which we think are especially significant. Although we haven't mentioned every ship type that has been built for the U. S. Navy, each has been significant to a degree and each has had a part in building the Navy we have today. No Navyman; no Navy ship, is insignificant.

— Erwin A. Sharp, JOC, USN.

NEW TRICKS—Old seadog *USS Mississippi* (EAG 128), former BB 41, introduced *Terrier* surface-to-air missiles to Fleet in 1954 maneuvers.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

MINESWEEPERS USS *Thrush* (MSC 204), USS *Falcon* (MSC 190) and USS *Nespelen* (AOG 55) are moored at Coco Solo, C.Z., before cruise.

Giant Torpedo Retriever

It's an unlikely designation, to be sure, but the 3700-ton, 493-foot frigate USS *John S. McCain* (DL 3) is being called the "world's largest torpedo retriever" out Pearl Harbor way these days. What's more, she's got a plaque naming her just that hanging in her wardroom for all the doubting Thomases to see.

It all came about not so long ago when the submarine USS *Gudgeon* (SS 567), also Pearl Harbor-based, conducted some torpedo-firing exercises off the 50th state. Practice torpedoes, valued at a not-inconsiderable 35,000 dollars each, are designed to float upon completion of their runs, so that they can be recovered and used over and over again during training exercises.

Recovery of these torpedoes is normally handled by 35- to 70-foot torpedo retriever boats. In this particular case, however, one of *Gudgeon's* practice shots went astray, and, despite an exhaustive search hampered by darkness, the wayward fish was eventually pronounced lost.

Back in port some four days later, however, *Gudgeon* got a surprise. Seems *McCain* had passed through the torpedo practice area some time later on her way into Pearl Harbor. Her alert lookouts had spotted the floating torpedo, and it was speedily hauled aboard.

The ornate plaque reads thus:

"Presented with gratitude to
USS John S. McCain (DL 3),
'World's Largest Torpedo Retriever'
by USS Gudgeon (SS 567) for
recovering a torpedo which was
missing in action and presumed lost."

YESTERDAY'S NAVY

On 3 Jun 1898, an attempt was made to close the harbor of Santiago de Cuba by sinking the collier *Merrimac* across the entrance. On 4 Jun 1805, a treaty of peace was concluded with Tripoli. All prisoners were to be returned and no more tribute was to be paid. On 18 Jun 1812, the United States declared war on Great Britain. On 19 Jun 1878, the office of Solicitor and Naval Judge-Advocate-General was abolished by Congress. On 22-23 Jun 1898, U. S. troops landed at Daiquiri, Cuba. On 30 Jun 1834, Congress passed an act for reorganization of the Marine Corps.

Deep Cruising Sub

Pollack (SSN 603), sixth submarine of the *Thresher* class, has been launched at Camden, N. J.

The 3700-ton ship can be controlled in a three dimensional course by a single man. An automatic feature is also included in the control system which keeps the ship at the ordered depth.

Living quarters on board *Pollack* have been designed for about 90 men to live comfortably while totally submerged for extended periods of time. The ship will be equipped with a continuously monitored air-conditioning system and an air-purification system.

Many design features have been incorporated in *Pollack* to decrease underwater sound emission. She will be equipped with the latest electronic equipment and the most advanced weapons control equipment, including semi-automatic loading and firing gear for the most modern submarine weapons. She will be able to cruise the oceans at greater depths than submarines of any previous class.

Successor to *Bronstein*

Bronstein (DE 1073) was launched at Westwego, La., in March. She will be followed this month by *McCloy* (DE 1038) which will be launched at the same yard.

Bronstein is the first escort ship to be equipped with the drone antisubmarine helicopter (DASH) and the antisubmarine rocket (*Asroc*). Her antisubmarine warfare capabilities are further increased by a bow-mounted long range sonar and antisubmarine torpedo launchers. She also carries 3-inch/50's.

Bronstein is 371 feet long and has a 40-foot beam. She displaces 2600 tons. She was named for LTJG Ben Richard Bronstein who died on board USS *Jacob Jones* (DD 130) in 1942.

The new *Bronstein* is the second ship to bear the name. The first was DE 189 which received the Presidential Unit Citation for outstanding combat service against German submarines during World War II.

Big Job for *Grasp*

After weeks of pondering, planning, pulling and panting, USS *Grasp* (ARS 24) finally freed the 400-ton Japanese ship *Hiroshima Maru No. 2* from the sand, rock and coral that make up Ala Moana Reef, midway between Honolulu and Waikiki Beach. It was no easy task. *Hiroshima Maru*, loaded with 300 tons of tuna fish, had run aground one stormy day earlier this year when heavy winds and surf tossed her from the marginal waters that mean safe passage into Honolulu Harbor.

As the days passed, attempts to free the beached ship became more and more futile. Each day she was washed further up the reef. By 14 February she had become so firmly grounded her owners instructed the skipper to abandon her. The hulk then became the responsibility of the U. S. Army Corps of Engineers.

After sizing up the situation the Army requested help from the Pacific Fleet's Service Force – conveniently headquartered near Pearl Harbor, just a few miles away. The salvage ship *Grasp* was assigned the job of removing the grounded ship – which by then appeared hopelessly landlocked. Navy and city officials agreed the ship had to be removed as quickly as possible. It was feared another storm would break the ship in two, leaving not only a navigational hazard but a health menace as well.

On 24 February *Grasp* went to work. Divers inspected *Hiroshima Maru's* hull and tested her compartments before pumping out the flooded spaces. After much figuring, measuring, and talking, it was decided that the best method of removal was through the use of a pulling barge equipped with two sets of beach gear. *Grasp* was also rigged with beach gear.

The pulling barge was anchored about 100 feet seaward from the hulk. *Grasp* was stationed 500 yards seaward. Then followed weeks of frustrating delays. Each time the hulk was pulled over one of the ridges of the reef, its position changed and a new survey of the ocean floor was necessary before further progress could be made.

Toward the end of the second had been pulled some 340 feet seaweek on the job, *Hiroshima Maru* ward, with a mere 25 feet to go before reaching water deep enough to float her. Then, weakened by 11 days of constant tension, two of the beach gear pulling wires snapped and the *Grasp* tow wire bridle parted, causing still another delay while new gear was installed.

Finally, on 11 March, *Grasp* freed the hulk and pulled her to deep water. The following afternoon, after 17 days on a tough assignment, she headed back to Pearl Harbor, pausing just long enough to see *Hiroshima Maru* safely towed into Honolulu Harbor for delivery to the Army –a little the worse for wear but still in good shape.

— Dann Grant, JO2, USN.

CAPT Sanders Selected to Head Waves

Commander Viola B. Sanders, USN, has been named to succeed retiring Captain Winifred Q. Collins, USN, as Director of the Waves. Commander Sanders will be promoted to captain when she assumes her new post as Assistant Chief of Naval Personnel for Women in August 1962.

CAPT Winifred Q. Collins, USN.

CDR Viola B. Sanders, USN

Commander Sanders comes to her new post from Norfolk, Va., where she was Director of Naval Personnel on the staff of the Commandant, Fifth Naval District. She will be the sixth director of the Waves since their establishment in 1942.

Since being commissioned as ensign in October 1943, Commander Sanders has served in numerous staff positions in Washington, has been Regimental Commander with the Recruit Training Command (Waves) at Great Lakes, Ill., and Bainbridge, Md., and has served in Japan.

Captain Collins will retire from the Navy 1 Sep 1962 after 20 years' service. Throughout her naval career, she has been a leader among Waves. She was in the first group to enter the Waves in 1942 as an ensign and she graduated with the first officer indoctrination class at Smith College, Northampton, Mass., in Sep 1942; she was one of the first two Wave officers sent overseas (late in 1944, to make plans for the assignment of the 4000 Wave officers and enlisted women who were sent to Hawaii); and she was one of the first Waves to transfer to the Regular Navy in 1948.

She was awarded the Bronze Star Medal for her meritorious service while assigned to the 14th Naval District, from 30 Oct 1944 to 11 Apr 1946.

She was Senior Assistant to the Chief of Staff (Administration) at the headquarters of the Commander in Chief, Naval Forces, Eastern Atlantic and Mediterranean, London, when she was named as Director of the Waves.

Back with Middle East Force

USS *Valcour* (AVP 55) has taken over as flagship of the U. S. Middle East Force in the Persian Gulf and Indian Ocean area – a part of the world to which she is no stranger. The veteran (launched during World War II) seaplane tender has been there 12 times before. In April, *Valcour* relieved USS *Duxbury Bay* (AVP 38) as Mid East flagship during ceremonies at Aden (southeast tip of the Arabian peninsula).

Many of *Valcour's* 220 officers and enlisted men are also old hands in the Mid East. One crew member – George W. Ailstock, BT3, is on his seventh cruise of the area, and 17 others are chalking up their fourth deployment.

Nuclear Power School Moves

New London's Nuclear Power School will soon move to a new home –The Naval Training Center at Bainbridge, Md.

Overcrowding occasioned by expanding intercontinental ballistic missile training and the increasing requirements of the Submarine School at New London were given as reasons for the move. The buildings vacated by this move of the nuclear school will be utilized by the Submarine School and the FBM Team Training Center.

SHORT STOP—An A4D *Skyhawk* makes arrested landing on 4200-foot runway in test at MCAS Quantico, Va.

Morest is the Most

U. S. Marine pilots landing at Quantico, Va., these days are operating their A4D *Skyhawk* jet aircraft from the air station's 4200-foot runway. Normally, jet aircraft of this type require eight to 10 thousand-foot runways.

This is possible because of "MOREST," (for MObile aRESTing equipment) a special type of arresting gear specifically adapted for short airfields. The equipment closely resembles the arresting gear used aboard aircraft carriers. When more advanced equipment of this type is developed, these same planes will be able to use 2000-foot-long airstrips.

Landing is only half the job of operating from an airfield. You must also be able to take off in a short area. Otherwise, your arresting gear is only useful for emergencies. Currently, two methods of takeoff are being used – catapults and JATO (Jet-Assisted Takeoff). At the present time all Marine Corps attack aircraft are equipped, or are being equipped, with JATO. With this assist at takeoff and with MOREST for landing, jet planes can operate virtually anywhere in the world.

The short airfield method will allow hastily constructed and rehabilitated airstrips to be used for jet aircraft, whereas under normal conditions only slower, propeller-driven planes would be able to use them.

Formal tests on these ideas were initiated at the Marine Corps Landing Force Development Center at Quantico, Va., in 1955. The first actual airfield test of the gear was conducted four years later at the Marine Corps Air Station in Beaufort, S. C.

First operational tests of a completed airstrip were made in 1960 in an amphibious assault environment on Formosa. For this test, a 3400-foot runway was established on the site of an abandoned Japanese fighter strip in some 70 hours.

In February 1961, the arresting gear was tested at Vieques, Puerto Rico.

Originally this type of arresting equipment was used primarily for field carrier pilot training and emergency landings. Well over $100 million has been saved in emergency landings alone by the use of this type of equipment.

New Nurse Corps Chief

The Navy Nurse Corps was given a new director this month in the person of Captain Ruth A. Erickson, Nurse Corps, USN.

Captain Erickson received her training at the Methodist-Kahler School of Nursing at Rochester, Minn., and received a BS degree in nursing education from Indiana University.

During her Navy career, Captain Erickson has served as Chief of Nursing Service in various naval hospitals, on the staff of the District Medical Officer, 12th Naval District, and as Personnel Detail Officer in the Bureau of Medicine and Surgery, Washington, D. C. She also had duty as Chief of Nursing Service on board the hospital ship USS *Haven* (AH 12) and accompanied the first war casualties evacuated to the United States from Pearl Harbor in SS *President Coolidge* in 1941.

Captain Erickson was Chief of Nursing Service at the U. S. Naval Hospital, Bethesda, Md., before she took over her new duties. She relieved retiring Nurse Corps Director, Captain Ruth A. Houghton, USN.

Amphibious Assault Ship

The first ship of the Fleet to bear the name of the historic World War II battle site of Okinawa was commissioned at Philadelphia in April.

The 592-foot ship USS *Okinawa* (LPH 3), is one of the first amphibious assault ships designed specifically for vertical envelopment assault tasks. She is designed to carry 2000 assault troops and 24 large amphibious transport helicopters in addition to her regular crew of approximately 525 men.

She displaces 18,000 tons and is propelled by a 22,000-horsepower steam plant.

She carries four twin 3-inch 50-caliber antiaircraft gun mounts.

The Navy currently has five amphibious assault ships in commission: USS *Boxer* (LPH 4), *Princeton* (LPH 5), *Thetis Bay* (LPH 6), *Valley Forge* (LPH 8) and *Iwo Jima* (LPH 2). *Guadalcanal* (LPH 7) is now under construction at the Philadelphia Naval Shipyard and will be launched late this year. The Philadelphia Naval Shipyard has been awarded a contract for still another LPH starting in early 1963.

Finalists in Ney Competition

By the time this issue reaches you, the 1962 Ney Awards selections will have been made. The finalists have been chosen by the committee and the traveling inspection team has started its visits to the finalists to determine the winners afloat and ashore and the runners-up.

The Secretary of the Navy established the Ney Memorial Awards Program in 1958 to commemorate the late Captain Edward F. Ney, SC, USN, who was head of the Subsistence Division, BuSandA, during World War II. The award is jointly sponsored by the Secretary of the Navy and the Food Service Executives Association, (formerly the Executive Stewards and Caterers Association).

General messes are judged for food preparation, serving techniques, sanitation, management practices, and use of existing facilities in the best possible manner. Command interest, it has been found, is an important factor in building up a winner. Training and interest in work are also important, as is careful choice of men for strikers and messmen.

Results will be announced in a later issue. The following is a list of nominees and the commands that nominated them – as received in the Subsistence Office up to press time. Asterisk denotes those commands that were also nominated last year.

From the candidates nominated by naval commands ashore and afloat, the following seven ships and stations have been selected by the Ney Awards Committee as finalists:

ASHORE: Naval Air Station, Miramar, Calif.; Naval Station, Argentia, Newfoundland; and Naval Air Station, Patuxent River, Md.

AFLOAT: USS *Kawishiwi* (AO 146), USS *Decatur* (DD 936), USS *Northampton* (CC 1) and USS *Helena* (CA 75).

From these top seven, the best mess ashore and the best mess afloat will be chosen for the Ney Award.

Naminee	Nominated by	Naminee	Nominated by
Naval Air Station, Johnsville, Pa.*	COMFOUR	**Naval Communication Station, Guam, M.I.***	COMMARIANAS
Naval Weapons Station, Yorktown, Va.	COMFIVE	**Naval Communication Station, San Miguel, P.I.**	COMNAVPHIL
Naval Communication Station, San Francisco (Stockton), Calif.	COMTWELVE	**Naval Security Group Activity, Kami-Seya, Japan***	COMNAVFORJAPAN
Naval Station, Adak, Alaska	COMSEVENTEEN	**USS *Yorktown* (CVS 10)***	COMNAVAIRPAC
Naval Air Station, Patuxent River, Md.*	COMPRNC	**Naval Air Station, Barbers Point, Hawaii**	COMFOURTEEN
Naval Station, Annapolis, Md.	COMSRNC	**Naval Air Station, Glynco, Ga.***	COMSIX
Naval Station, Rodman, C.Z.	COMFIFTEEN	**Bremerton Group, Pacific Reserve Fleet, Bremerton, Wash.**	COMTHIRTEEN
Naval Construction Battalion Center, Davisville, R.I.	COMONE	**USS *Harder* (SS 568)**	COMSUBLANT
USS *Iwo Jima* (LPH2)	COMPHIBPAC	**USS *Constant* (MSO 427)**	COMMINPAC
Naval Station, Argentia, Newfoundland*	COMAIRLANT	**USS *Helena* (CA 75)**	COMCRUDESPAC
USS *Independence* (CVA 62)*	COMAIRLANT	**Naval Air Facility, Naples, Italy**	COMNAVEUR
USS *Sperry* (AS 12)	COMSUBPAC	**Naval Station, Guantanamo Bay, Cuba**	COMTEN
USS Gen. *William Mitchell* (AP 114)	COMSTSPAC	**Naval Training Center, Great Lakes, Ill.**	COMNINE
		USS *Northampton* (CC 1)	COMCRUDESLANT

HOMEPORT BOUND—After completing seven-month tour with the Seventh Fleet, *USS Los Angeles* (CA 135) sails for Long Beach, Calif.

Fleet Ballistic Missile Subs

Names have been chosen for three Fleet ballistic missile submarines to be launched in mid-1963. They are *James Madison*, *Tecumseh* and *Daniel Boone*.

James Madison, the name assigned to SSBN 627 is, of course, also the name of the fourth president of the United States, who also served as a member of Congress and Secretary of State.

Madison was also one of the authors of the Federalist Papers and, as such, influenced public opinion in favor of ratification of the United States Constitution.

Tecumseh (SSBN 628), bears the name of a Shawnee Indian chief who was one of the outstanding Indian leaders in the history of North America.

He attempted to persuade the United States to recognize his principle that all Indian land was common possession and could not be disposed of by individual tribes.

When the government rejected this principle, he tried to unite the tribes of the northwest, south and eastern Mississippi Valley, but failed. He died in the Battle of the Thames fighting with the British during the War of 1812.

Daniel Boone (SSBN 629), as everyone knows, carries the name of the 18th century frontiersman who explored parts of Florida, Kentucky and Missouri in pioneer times.

CRULANT PLAY-OFF—*USS Newport News* team plays *USS Boston* (left) and takes on *USS Northampton* (rt.).

Volleyball and Boxing Champs

THE NAVAL AIR RESERVE Training Unit (NARTU) of NAS Alameda has retained the All-Navy Volleyball championship on the Pacific Coast for a second straight year.

Playing on their home grounds (the NAS Alameda gym) the slick NARTU spikers, who had earlier swept through 12th Naval District and Pacific Coast Region-level competition to earn their way into All-Navy play, downed three straight opponents en route to the crown.

Representing other Regions were:

Atlantic Fleet – CRUDESLANT, composed entirely of sailors from the tactical command ship USS *Northampton* (CC 1) and the heavy cruiser USS *Newport News* (CA 148).

North Atlantic – NAS Quonset Point, R. I., augmented by players from NAS Patuxent River, Md.; NAS Olathe, Kans.; and NAS Brunswick, Maine.

Western Pacific – Airborne Early Warning Barrier Squadron Pacific (Det. A) from NAVSTA Midway; augmented by Navymen from VR-21, Mobile Construction Battalion 11 and SUBPAC.

South Atlantic – NAS Pensacola, including players from NAS Jacksonville, Fla.; NAS Memphis, Tenn.; NAAS Whiting Field, Fla.; and NAAS Meridian, Miss. Results:

First day: SOLANT – 15, 15; NORLANT–8, 9. PACCOAST–15, 15; WESTPAC–7, 10. SOLANT–15, 15; LANTFLT–9, 5. NORLANT–15, 16; WESTPAC –9, 14.

Second day: PACCOAST – 15, 15; SOLANT – 9, 6. NORLANT – 15, 15; LANTFLT–10, 5. SOLANT–15, 6, 15; NORLANT–5, 13, 5.

Third day: PACCOAST–11, 15, 14; SOLANT–13, 13, 10.

The three-day tourney was conducted under USVBA rules which call for 15 points or a total of eight minutes of playing time for each game. The PacCoast entry barely worked up a sweat in copping its first two starts, but was forced to the wire in a grueling finale by an inspired South Atlantic Region crew which had worked its way back through the loser's bracket.

Members of the title-winning squad were:

Ed Lee, ADJ1, USN, NARTU Alameda

Barry Greenhalgh, RM1, USN, NARTU Alameda

John Smith, ADJ2, USN, NARTU Alameda

Jay Hauk, AN, USN, NARTU Alameda

Bob Reading, AMH3, USN, NARTU Alameda

Marty Magi, LT (MC), USN, Oak Knoll Naval Hospital

John McCaull, LT, USN, VP-19

Jerry Hren, AN, USN, PhibPac

Al Price, ENC, USN, PhibPac

Ron Arndt, LTJG, USN, NavShipYd San Francisco

NORTH ATLANTIC REGION's talented ringmen captured seven of 10 titles, three 1961 champions retained their crowns and three former titleholders regained theirs in the 1962 All-Navy Boxing Tournament which took place at Naval Station, Norfolk, Va.

Three bristling sessions of Katie-bar-the-door mitt-slinging on 4, 5, and 7 April saw only 14 of the 29 bouts go the maximum three-round distance, as nine TKOs and six KOs kept capacity crowds in an almost constant uproar. And in the end, the Navy possessed one of the strongest sets of champions ever to carry its colors into subsequent interservice ring wars. They were:

112 lbs – SN Joe Gaiter, USS *Kitty Hawk* (CVA 63), PACCOAST Region.

119 lbs – AN Larry Stubbs, USS *Midway* (CVA 41), PACCOAST Region.

125 lbs–SA Bill O'Bannion, VR-1, NAS Patuxent River, NORLANT Region.

132 lbs – CS3 John Dixon, NAS Patuxent River, NORLANT Region.

139 lbs – HA Mickey Jones, Bethesda Naval Hospital, NORLANT Region.

147 lbs. – HN Ralph Pellicia, Bethesda Naval Hospital, NORLANT Region.

156 lbs – SN Jim Rosette, USS *Myles C. Fox* (DDR 829), LANTFLT Region.

165 lbs – SN Richard Nelson, USS *Lake Champlain* (CVS 39), NORLANT Region.

178 lbs – SH3 John Hunter, CBC Davisville, R. I., NORLANT Region.

Heavy – YN3 Richard Pettigrew, Bethesda Naval Hospital, NORLANT Region.

Successfully defending titles they won a year ago at Newport, R. I., were Gaiter, Rosette and Hunter. Gaiter, who won his way into the finals with a first-night TKO, had the easiest time of the trio, winning by default when his scheduled opponent for the 112-lb crown, LANTFLT's Romy Perpetua, was refused permission to enter the ring because of a sprained wrist.

Rosette, the classy LANTFLT southpaw, continued his Navy-wide dominance of the light-middleweight ranks for the fourth consecutive year, with a second-round TKO over NAVSTA Treasure Island's YN2 Billy Smith, a veteran of more than 250 Navy bouts. Meanwhile, Hunter, the fighting Seabee from Davisville via USS *Lookout* (YAGR 2), blasted Pearl Harbor's Larry High to sleep at 1:35 of the first round in a spectacular defense of his 178-lb championship.

Bantamweight Stubbs, lightweight Dixon and heavyweight Pettigrew were the three former champs who climaxed comeback campaigns with title-winning efforts.

Stubbs, the speedy little airman who was both All-Navy and Interservice 119-lb champion in 1960, but who did not compete last year, outsped his LANTFLT antagonist, Garland Hayes of USS *Boston* (CAG 1), for a clear-cut decision.

Dixon, pride of NAS Pax River's 1961 Ney Award-winning commissary, decisioned NAS Oceana's Art Brown, another LANTFLT standard-bearer. Pettigrew, who had beaten Vern Casimir for 1960 All-Navy heavyweight laurels then bowed to that worthy in a regional encounter a year ago, gained his revenge this time around by besting the equally huge NAVSTA Pearl Harbor slugger in the in-fighting through three bruising rounds.

VR-1's O'Bannion gave away experience, but nothing else, in decisioning still another LANTFLT representative, Bobby Nichols of USS *Little Rock* (CL 93), for the 125-lb title. Nichols, another long-time Navy scrapper who reigned as All-Navy champion in 1953-54-55, gave it his best, but couldn't keep the pace against his younger and speedier foe.

For Bethesda's Pellicia, his smashing third-round TKO triumph over PACCOAST's Henry Wade of USS *Currituck* (AV 7) for welterweight honors was especially sweet. The hustling hospitalman was well on his way toward winning the All-Navy 139-lb crown at Newport last year when a cut handed him a tough-luck TKO loss in the finals.

Nelson, who came off *Lake Champlain* to battle his way to a First Naval District championship and grab a spot on the NORLANT Region squad, out-toughed Jim Smallwood of USS *Northampton* (CC 1) (the fifth member of the LANTFLT delegation to gain the final round) for a unanimous decision in their 165-lb go. Bethesda's Jones entered the 139-lb throne room by bombing Pearl Harbor's WESTPAC Region champ, Andy Johnson, for a first-round TKO.

WITH THE 1962 Interservice bouts also scheduled for the NAVSTA Norfolk gym, Navy mitters were on familiar ground – and they posted the best performance any Navy squad has managed since the inception of Interservice boxing back in 1953.

Navy's past showings – in this annual fistic carnival matching the cream of the Army, Air Force, Navy and Marine Corps inside the squared circle – have been, at the very least, unfortunate. Navy ringmen have managed only 10 individual wins in nine tourneys. Army has won five team titles, Air Force three, the Marines one; the Navy – nary a one.

TITLE BOUT — David Smith, AN, (left) and Bob Nichols, BM3, slug it out for the 125-pound title.

They didn't win this year either–but they did give the strong Army and Air Force clubs a real run for the money. Six Navymen – Stubbs, Dixon, Pellicia, Nelson, Hunter and Pettigrew – whipped first-round foes to reach the championship flight, and the muscular Pettigrew capped a fine year by decisioning the Marine Corps' Percy Price for the Interservice heavyweight title. Army, with four individual champions and a total of 10 points, took team honors, while Navy's seven points tied them with Air Force for second place.

– Jerry McConnell, JO1, USN.

FOURTH TIME All-Navy champ, Jim Rosette, SN, dodges right and decks opponent in Atlantic Fleet matches.

SERVICESCOPE

Brief news items about other branches of the armed services.

THE AIR FORCE has launched a "Project Star Gazer" high-altitude balloon system from Chico, Calif., to an altitude of approximately 88,000 feet.

The unmanned balloon was released by Air Force scientists in a successful test of instrumentation preliminary to the launching of two men and a specially stabilized telescope to an altitude of more than 16 miles. The balloon responded well to all commands transmitted to it by radio from the ground. Winds carried it westward over the Pacific Ocean. Approximately 60 miles southwest of San Francisco the balloon released its test vehicle on radio command to float on a parachute to the water's surface.

★ ★ ★

COMBAT BOOTS AND WOMEN'S exercise clothing will be standardized for all the services when present stocks are exhausted. This has been ordered by the Department of Defense as an economy measure.

The new boots will be of the black leather, hard toe variety. Except for the type of closure, they will be identical for all the services. Army, Navy and Air Force boots will have eyelets; the Marines will have hook closures. (Marines must be able to release their boots quickly – if plunged into deep water during an amphibious landing, for example. Hooks, however, would be a possible hazard to Army paratroopers.)

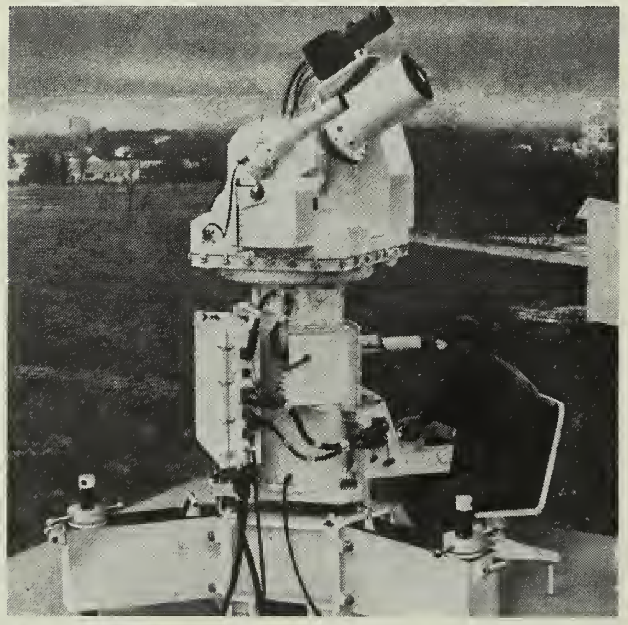
Women's exercise clothing will be of blue material with standard design and sizes for all services.

Standardization of boot types will mean an annual saving of $846,000, and the standardized exercise clothing will save another $115,000.

★ ★ ★

THE DEFENSE COMMUNICATIONS AGENCY established an area communications control center at Fort Carson, Colo., last month. It is the fourth such center to be established since mid-1960 (the first in the continental United States). The others are located in Hawaii, Europe and Alaska.

The Defense Communications Agency exercises operational and management control over the Defense communication system.


ARMY'S electric-optical system is used to track and record the flight of missiles and satellites.

FLYING GASSER — Air Force's B-58 *Hustler* bomber refuels from KC-135 tanker over Front Royal, Va.

★ ★ ★

IN THE GLACIAL WASTELANDS of northern Greenland and Canada, airport facilities are few, far between – and often inaccessible, owing to heavy blankets of fog. Over the years, as military and commercial air traffic across the area has increased, the need for emergency airfield sites has become more and more apparent.

Since 1956, Air Force explorers have been scouring millions of square miles of the northern ice lands in search of suitable landing strips. The search may be about over. More than 100 promising locations have been found – many of which are natural strips that need little or no preparation before landings and takeoffs can be made safely. Ground parties, working with the cooperation of officials in Greenland and Canada, have found that many miles of northern glacial areas are smooth, hard, and ice-free.

At last report, the Air Force had located more than 50 potential airstrips in northern Greenland. A study of one million square miles of northern Canada located another 50.

★ ★ ★

THE AIR FORCE and the Atomic Energy Commission have pooled their resources in an attempt to solve one of the major problems of interplanetary travel. Scientists of the two groups are looking for a source of power that will keep the electrical propulsion engines of space ships and the electrical components of satellites operating over a long period. They believe nuclear energy may be the power source that's needed.

As a starter, nuclear-electrical power units developed by the AEC will be tested by the Air Force in orbiting satellites to see if they can function over extended periods. Success of this program, known as *Snapshot*, may lead to the testing of more powerful units.

A RADIO-SOUNDING TECHNIQUE developed by the U.S. Army Signal Corps has been used to measure the depth of an enormous glacier in the far-north region of Canada.

The radio-sounding method consists of measuring the time it takes for signals to penetrate ice and return to a receiver after reflecting off the underlying soil, rock or water.

Radio sounding of ice is comparable to, but possesses advantages over, the seismic soundings now widely used. In seismic sounding, explosives are set off on the surface, the sound waves picked up from the bottom by interlinked microphones, and the results analyzed. However, the process is expensive, time-consuming and requires skilled seismologists. It is claimed that radio soundings can be made quickly with relatively simple equipment by operators who require little special training.

★ ★ ★

THE AIR FORCE thinks it has whipped the problem of jet fuel icing, which has been an annoyance since jets first flew.

The solution sounds simple — just add an anti-icing compound to the fuel. However, it was necessary to find the one best suited to military needs.

After evaluating more than 300 commercial additives, test of the most promising began in August 1960. Since then, more than 45,000,000 gallons of fuel with the additive have been used for more than 16,000 flight hours without a single report of icing.

It is anticipated that the additive will become a standard part of armed forces jet fuel specifications some time this year.

★ ★ ★

THE U. S. COAST GUARD has introduced RATAN, its latest electronic aid to small-boatmen, at a test installation at the Coast Guard Lifeboat Station, Sandy Hook, N. J. This installation represents the first time that television has been incorporated into an aids-to-navigation system for civilian maritime use.

RATAN, which stands for Radar and Television Aid to Navigation, uses an image provided by a high definition shore-based radar which is then transmitted by UHF television for reception aboard ships and boats in the general area. The picture received would be interpreted by the navigator so as to maintain a continuous position fix and to know his location with respect to the movements of other vessels in the vicinity.

UNDER ITS WINGS — USAF B-52H *Stratofortress* has been equipped with *Sky Bolt* air-launched missiles.

SECTIONAL — Drawing shows U. S. Army's mobile assault bridge being assembled to span a river.

The present RATAN project is purely experimental and is not intended for use by the public in its existing status.

★ ★ ★

THE ARMY HAS DEVELOPED a new space tracker named PIM (Precision Instrument Mount) — which is reported to be as rugged as an artillery piece and as accurate as an astronomer's telescope.

PIM has the basic features of a sighting telescope and camera to record the course of objects in space, in addition to new capabilities in both optical and electronic tracking, including television.

Even under adverse conditions, PIM records the position of objects to an angular accuracy of 180th of a degree and marks the time within one-thousandth of a second. It follows the course of missiles and satellites moving several miles per second, and keeps equally close track of manned and drone aircraft meteorological or special-purpose balloons, or any other moving target. It can detect and track objects unseen by its operator.

PIM can track automatically, semi-automatically or manually. During manual operation the operator aligns the target against the crosshairs of the sighting telescope. He follows the flight path by use of a "crystal ball" control device (the ball type control is actually made of steel) on the power-assisted turret.

Special tracking heads, either optical or infrared, are used for completely automatic operation. When set for automatic operation, the tracker uses any standard 35 mm or 70 mm still or motion picture camera. The camera photographs targets and records their position and time on the pictures. At the same time, the system records angular data in digital form which can be stored on tape or fed directly into a computer.

THE BULLETIN BOARD

Families May Now Join Navymen Serving on Duty in Western Europe

The restrictions on dependents' travel to Western Europe have been removed. Your dependents can again travel to Europe at government expense.

Announcement that the ban has been lifted was greeted as good news by Navymen in Europe, many of whom had been separated from their families since last fall.

The ban – imposed during the Berlin crisis—allowed for the stepped-up transportation of emergency troops and supplies. It was also maintained as a step toward reducing the flow of gold and dollars overseas.

What amounts to a token travel ban is still in effect, but this does not apply to the Navy. At present, the Army is working on a system of rotating small support units for short European tours of 13 months or less. Men in these units will not be accompanied by dependents.

Official announcement that the ban had been lifted was made Fleetwide in AlNav 9-62 on 26 April. In general, this is the situation.

- Men who have been in Europe the longest will be the first to have their families join them.
- Only men who will have 12 months or more remaining on their overseas tours at the time their dependents would arrive are eligible to apply for transportation.
- All transportation for dependents is subject to the availability of approved non-transient family housing in the area of assignment. (Transient-type hotel accommodations are not approved for this purpose.)
- Priority of assignment of family housing is determined by the date the Navyman departed the U. S., not the date his dependents arrived in Europe. (This avoids giving any advantage to those whose dependents traveled to Europe, at their own expense, during the ban.)
- U. S. "non-recognition" of dependents in Western Europe has been lifted. Dependents who paid their own way and have been living off base can move into government quarters. When the serviceman concerned finishes his tour, his dependents will be eligible for passage home at government expense.

The steps to be taken by Navymen concerned with the lifting of the ban are spelled out in special instructions.

Eight Thousand Navymen Advance to Grade of Chief

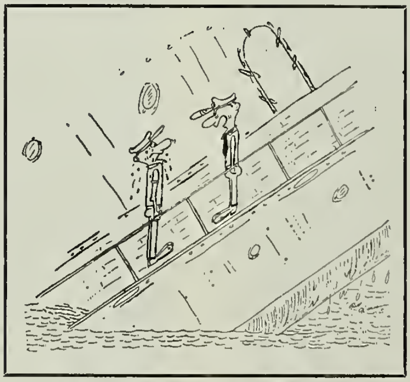
Approximately 8000 PO1s who went up for chief last February will be doffing their white hats in favor of the CPO variety between now and next January. The 8000 new chiefs are being advanced in five increments, the first of which – and by far the largest – was scheduled to be processed in May. The advancement-to-CPO statistics look like this:

Month	Approximate No. To Be Advanced
May 1962	3600
July 1962	1500
September 1962	1200
November 1962	950
January 1963	750

The 8000 chiefs-to-be represent 81.5 per cent of the PO1s who last February passed the service-wide CPO exams. A total of 27,920 men and women took the exams.

The advance-after-passing percentage is up 15.1 over last year. In 1961, 66.4 per cent of those who passed were advanced.

All-Navy Cartoon Contest
Peter A. Hansen, EN2, USN



"...and after we get this little ballasting error corrected Chief, I suggest we discuss your E-9 prospects."

Navymen Who Were Extended Involuntarily Are Returning to Inactive Duty

Officers and enlisted men who were involuntarily extended on active duty as a result of the cold war flare-up last year are now being released to inactive duty. A large number will go out before 30 June 1962.

Navymen will, however, have some voice in deciding their own dates of release. The Navy doesn't plan just to turn men out to pasture, so to speak, with no warning.

There are several categories of men affected.

Naval Reserve officers whose original release-from-active-duty date was before 30 June 1962, and who were involuntarily extended beyond June 1962 as a result of Public Law 87-117, may:

- Be released in June 1962.
- Be released on any date between June 1962 and the date to which they were involuntarily extended. (A specific date must be chosen in this case.)
- Voluntarily extend on active duty in accordance with BuPers Inst. 1926.1C.

Year group 1959 NROTC Regular Navy officers with basic obligated service expiring before 30 June 1962, who have submitted resignations to be effective within one month after completion of basic obligated service and who have been notified of effective dates after 30 June 1962, may:

- Be released in June 1962.
- Be released on any date between June 1962 and the date to which involuntarily extended. (A specific date must be chosen in this case.)
- Withdraw resignation and continue on active duty.

The effective dates for resignation and retirement of Regular Navy officers, other than the NROTC Regulars mentioned above, will continue to be dictated by the needs of the service. The current shortage of experienced officers will undoubtedly necessitate adjusting dates in many cases where reliefs are required:

Enlisted men retained on active duty as a result of Public Law 87-117 will serve out their involuntary extensions if these extensions expire before 30 June 1962. EMs involuntarily extended beyond 30 June 1962 by this law will be released on 30 June 1962 if they choose. (This does not apply to involuntarily extended Reservists who were involuntarily recalled to active duty with their units.) Enlisted personnel (including those holding authorizations for transfer to the Fleet Reserve) who have been involuntarily extended beyond 30 June 1962, and whose separation by 30 June would upset personal plans, may, by signing a page 13 entry in their service jackets, be retained on active duty until the expiration of the involuntary extension. In such cases, they should voluntarily extend their enlistment and/or active duty agreement for the number of months necessary to serve out the involuntary extension.

Full information may be found in CNO message 172250Z of April 1962.

BuPers Manual Revises Rules On Service Record Entries

Navymen who work with service records will find recent alterations to the *Bureau of Naval Personnel Manual* of particular interest. (The changes were transmitted with BuPers Notice 1070 of 12 Mar 1962.)

One change in the manual eliminates the use of page 10 which was used in recording inactive personnel gains to active duty strength and extensions of active duty of Naval Reserve, Fleet Reserve, retired personnel and USN inductees.

Current personnel accounting procedures don't require such distinction.

New service record pages and procedures have been included. They are designed to reduce the number of pages in the service record and to improve its reference value by consolidating entries.

The Bureau's effort to improve the administrative remarks section has manifested itself in the changes to the administrative remarks page.

The emphasis is now on remarks which have lasting value and are not of primary interest to the Navyman's current duty station.

The Bureau's analysis of service record remarks resulted in a list of entries frequently recorded which the Bureau considers to be unnecessary. The list is included as an enclosure to the Notice.

The changes became effective the first of this month. The initial distribution of the Transfers and Receipts and Administrative Remarks forms was limited. Additional supplies are now available at all forms and publications distribution points.

Three New Courses Offered To Officers and Enlisted Men

Three new correspondence courses — one officer and two enlisted — are now available from the Navy Correspondence Course Center at Scotia, N.Y. Four others, meanwhile, have been discontinued.

Enlisted courses are administered (with some exceptions) by your local command instead of the Correspondence Course Center.

Officer courses, on the other hand, are administered directly by the Center. Courses for both officers and enlisted personnel on inactive duty are also handled in this fashion.

New courses available are:

Course	NavPers No.
OCC Supply Duties for General Line Officers	10412
ECC Basic Electricity, Part II	91226
ECC Aviation Structural Mechanic S 2, 3	91364

Discontinued courses are *OCC Blood Transfusion, Methods and Procedures* (NavPers 10998-1); *ECC Aviation Structural Mechanic 3*, Vol. I (NavPers 91625-A); *ECC Aviation Structural Mechanic 2*, Vol I (NavPers 91626-A); and *ECC Navy Mail*, Vol. II (NavPers 91460).

WAY BACK WHEN

Navy's First Doctors

The story of early Navy doctors is as old as the Navy itself. When the Continental Congress authorized a naval force in 1775, provisions were made to include medical professionals in the ships' complements. Ships which carried 20 or more guns had surgeons who ranked below the master and above the chaplain; smaller ships carried surgeon's mates who held the status of warrant officers.

Early appointments of surgeons and surgeon's mates were made hastily and without much formality. Sometimes the ships' captains appointed surgeons without reference to other authority. In 1777, Congress ruled that no one was to be appointed a surgeon or surgeon's mate without a certificate of examination which attested to his professional qualifications.

The earliest Continental Navy medical officers were paid between $21 and $25 a month, depending on the size of the ships in which they served. Surgeon's mates on board ships of 10 to 20 guns were paid from $21 to $23; surgeons on ships of 20 guns and upwards received $25 (later raised to $30).

Some early Navy doctors who served on board ships commanded by John Paul Jones between 1775 and 1781 were Joseph Harrison, in *Alfred;* Ezra Green, in *Ranger;* and Lawrence Brooks, in Bonhomme *Richard.*

Until 1799, Navy medical professionals acted independently of each other. There were no provisions for the coordination and supervision of their activities. However, in March 1799, the first step toward the organization of military medicine was taken by Congress. It provided for the appointment of a physician general who was charged with the supervision of all military hospitals and the general supervision of all Army and Navy medical functions and personnel.

In 1842 the Bureau of Medicine and Surgery was established, and, to this day, its responsibilities are fundamentally the same as those it held 120 years ago — safeguarding the health of the Navy, caring for sick and injured naval personnel, keeping health and medical records, and setting professional standards for the Navy's physicians, dentists, nurses and other specialists.

Uniform Changes Include New Sports Model Shirt, Lightweight Raincoat

If you're an enlisted man, the day may not be far off when you can discard your conventional-type dungaree shirts for a new "sports" model.

If you're a male officer or chief petty officer, you may soon, if you wish, add a lightweight, single-breasted raincoat to your wardrobe.

These, and other notes on uniform items, are contained in the latest change to *U. S. Navy Uniform Regulations.* The change has been circulated Navy-wide in the form of BuPers Notice 1020 of 12 Mar 1962.

The new style dungaree shirt is described as "blue cotton chambray, convertible sport style collar, long sleeves, two patch pockets, squared off bottom, matching blue stitching and no shoulder yoke." The shirt will not be authorized until it is distributed through the Navy supply system (it will be sold in small stores) when the old type is depleted.

The raincoat, not yet available or authorized for wear, is "lightweight, single-breasted, box style; fly front; set-in sleeves; beltless; shoulder loops; dark blue synthetic fabric." The new raincoat will be an optional article when the effective date for wearing is established.

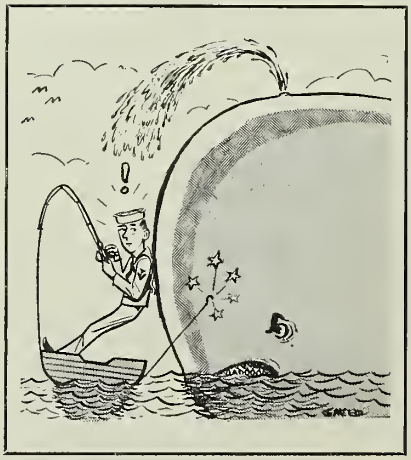
Women officers may now wear, as appropriate, the Dinner Dress Blue Jacket Uniform or Dinner Dress White Jacket Uniform. These consist of mess jacket, dress skirt, and cummerbund, dark blue and white, respectively; dress shoes and handbag (black, white); white dress shirt; black dress necktie; service hat (or tiara, optional); beige stockings; and miniature medals. The uniform is optional for all women officers until 1 Jul 1964, when it becomes mandatory for commanders and captains.

Another new item for women is a redesigned white plastic handbag. The new bag will replace the current white handbag when available and on a date yet to be announced. The handbag will be of white plastic; embossed with a leather grain pattern; envelope style; not more than 11 inches wide and 7½ inches deep; with detachable shoulder strap. The bag may be used with or without the strap.

"Isn't there something else for Tiny to do besides chip paint?"

In the case of aviation cadets and aviation officer candidates, the aviation green working uniform has been deleted from their minimum outfits; working khakis will be prescribed instead.

Of general interest to all naval personnel is a spelled-out version of regulations which govern the wearing of hats during outdoor ceremonies. A portion of Article 1110.2 of *Uniform Regs* now reads: "Out of doors, personnel should remain covered at all times except when ordered to uncover, or during religious services not associated with a military ceremony. Thus, unless ordered to uncover, personnel shall remain covered during the invocation or other religious portions of ceremonies which are primarily military in nature, such as changes of command, ship commissionings and launchings, military burials, etc. The chaplain conducting the religious portion of the ceremony will be guided by the customs of his church with respect to wearing of head covering.



"Chief wasn't kidding when he said this was a whale of a fishing spot!"

Now You Can Frame That Good Conduct Award, Certificates To Be Distributed

A handsome, suitable-for-framing certificate has been added to the honors you receive when you earn a Good Conduct award. The certificate, which became an official part of the Good Conduct award in February, is issued by the Chief of Naval Personnel. BuPers Notice 1650 of 5 Mar 1962 laid out policy guidelines for issuing the certificate. In general:

- If you have earned a Good Conduct award for which entitlement has not been determined by the Chief of Naval Personnel, your commanding officer may submit a request to this Bureau for a certificate —and a medal, if you've earned only one award. You will also be notified of other awards earned for which a determination of entitlement has not already been made.
- A Good Conduct Award Certificate will also be issued, upon request, to members whose entitlement to the last award earned was determined by the Chief of Naval Personnel before February 1962, provided they do not have sufficient obligated service to earn another award before the current enlistment expires. Your commanding officer, upon request, will submit your name and eligibility date to the Chief of Naval Personnel if you are eligible to receive a retroactive certificate. The forwarding of these certificates may take several weeks because of the workload involved. However, they will be sent as soon as possible, and a follow-up request should not be made.

The Good Conduct Award Certificate is prepared in the Bureau of Naval Personnel and forwarded to your commanding officer for his signature. The certificate displays your name, rate, branch of service, the number of the award (first, second, third, etc.), and the date on which service for award was completed.

To rate the Good Conduct Medal

at present you must serve three years of continuous active duty with a clean record — no convictions by courts-martial, no non-judicial punishment and no sick misconduct. You must also maintain a mark of at least 3.0 in each of the traits on which you are evaluated twice a year (professional performance, military behavior, leadership and supervisory ability, military appearance and adaptability).

Effective 1 Nov 1962 you'll have to serve longer before you can become eligible for a Good Conduct award; four years of continuous active duty will be required instead of three.

Funds Allocated for Tuition Aid for Courses at High School or College Level

Funds have been allocated to headquarters of all naval districts, the Potomac and Severn River Naval Commands and naval commands in Europe, Japan and the Marianas for tuition aid in an educational program for active duty personnel.

The funds will be used at the discretion of these commands to make partial payment of tuition for voluntary off-duty courses taken by military personnel who have their commanding officer's concurrence.

To participate in the program the prospective student must be a member of the Regular Navy or Naval Reserve or a member of another service assigned to duty with the Navy.

Students in service schools are discouraged from making application unless their commanding officers feel participation in the program will not interfere with their training.

Officers who participate must agree to serve in the Navy for two years after completion of the course.

The courses taken by applicants are subject to approval. They must be taken for credit (including extension credit). They can be high school level in a program leading to a high school diploma or to meet college entrance requirements.

College undergraduate courses may be taken if they contribute to qualifications for a degree. Courses taken by an individual who already has a bachelor's degree and who is working toward an additional baccalaureate are also likely to be approved.

Other courses that may be taken are high school or college courses which will contribute to professional qualifications.

Graduate courses which will contribute to qualifications for an advanced degree in education, engineering, international relations, management, mass communications, mathematics or physical science are also encouraged.

Courses in foreign languages at any level will be approved, but no correspondence courses of any kind will find approval. The courses must be given by an accredited institution. High schools should be listed in *Public Secondary Day Schools* (1958-59 or later issue).

Colleges, universities and junior colleges must be listed as accredited by their regional accrediting associations in the Department of Health, Education and Welfare's *Education Directory, Part 3 — Higher Education.*

Study at foreign colleges and universities is also permissible in cases individually approved by the Chief of Naval Personnel.

When requesting approval of a foreign school, you should explain the academic level of the course or degree desired, the possibility of your completing the degree requirements before your transfer and the unavailability of similar degree opportunity through U.S. schools.

Those who are selected are eligible to receive up to 75 per cent of the tuition cost, provided it does not exceed $13.50 per semester hour, $9.00 per quarter hour or, for high school courses, $40.50 per Carnegie Unit. All other costs must be borne by the individual.

So far as the Navy is concerned, the student can take as much work as he feels he can carry. However, the Navy will not subsidize more than seven semester hours in any semester, seven quarter hours in any quarter or two Carnegie Units in any academic year.

Full details concerning the program are in BuPers Inst. 1560.10C.

HOW DID IT START

Ice-Skating in the Antarctic

It sounds suspiciously like a case of hauling coals to Newcastle to us — but according to late word received from way down south, crew members of the attack cargo ship USS *Arneb* (AKA 56) have built an ice-skating rink. In Antarctica, yet.

Christened "No-Squaw Valley," *Arneb's* rink has been constructed on an ice shelf of the Ross Sea, near the Navy's McMurdo Station Antarctic base. It is, say its creators, only the forerunner of a much more ambitious winter sports center they plan to build if *Arneb* returns next year.

LTJG James A. Treanor engineered the rink. Machinist's Mate Third Class Bill Kuepper, Radarman Third Class Robert Sullivan and Storekeeper Third Class Gordon Bushman straw-bossed the crews which formed, cleared and sprayed the ice. Forming ice, as you might well suspect, was no problem whatsoever — but blizzards howling down from the South Pole plateau drove the workers back to the safety of their ships on three separate occasions.

Ice skates issued to those desiring to use the rink were rented from an indoor rink in Christchurch, New Zealand, which had closed down for the summer. And just to prove they're not in the least bit selfish, the *Arnebbers* have invited crewmen of two neighboring icebreakers — USS *Glacier* (AGB 4) and the Coast Guard's USCG *Eastwind* (WAGB 279) — to share the facilities with them.

They haven't neglected the needs of the inner man, either.

Alongside the rink, and hard by the ship itself, they've built a small refreshment stand. A large sign adorns the outside of this stand — the mute voice, as it were, of someone crying in the wilderness. It reads, simply, "Waitress Wanted — No Experience Necessary."

Latest List of New Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

Pocketful of Miracles (1901) (C) (WS): Comedy; Bette Davis, Hope Lange.

Secret of Deep Harbor (1902): Melodrama; Ron Foster, Merry Anders.

Fear No More (1903): Melodrama; Jacques Bergerac, Mala Powers.

Price of Silence (1904): Melodrama; Gordon Jackson, June Thorburn.

Colossus of Rhodes (1905) (C) (WS): Melodrama; Rory Calhoun, Lea Massari.

Bachelor Flat (1906) (C) (WS): Comedy; Tuesday Weld, Richard Beymer.

Saintly Sinners (1907): Comedy-Drama; Don Beddoe, Ellen Corby.

Mysterious Island (1908) (C): Melodrama; Michael Craig, Joan Greenwood.

Flower Drum Song (1909) (C) (WS): Musical; Nancy Kwan, James Shigeta.

Tender is the Night (1910) (C) (WS): Drama; Jennifer Jones, Jason Robards, Jr.

The George Raft Story (1911): Drama; Jayne Mansfield, Barrie Chase.

The Happy Thieves (1912): Comedy-Drama; Rita Hayworth, Rex Harrison.

The Two Little Bears (1913) (WS): Drama; Eddie Albert, Jayne Wyatt.

Madison Avenue (1914) (WS): Drama; Dana Andrews, Eleanor Parker.

Gun Street (1915): Western; James Brown, Jean Willes.

Sail a Crooked Ship (1916): Comedy: Robert Wagner, Dolores Hart.

By the Light of the Silvery Moon (1917) (Re-Issue): Musical; Doris Day, Gordon MacRae.

April in Paris (1918) (Re-Issue): Musical; Doris Day, Ray Bolger.

His Majesty O'Keefe (1919) (Re-Issue): Melodrama; Burt Lancaster.

All-Navy Cartoon Contest
LCDR George P. Matherson, USN

"Which one do we shoot tonight, sir?"

Jim Thorpe All American (1920) (Re-Issue): Biographical Drama; Burt Lancaster, Charles Bickford.

Dial "M" for Murder (1921) (Re-Issue): Drama; Ray Milland, Grace Kelly.

Force of Arms (1922) (Re-Issue): Drama; William Holden, Nancy Olson.

West Point Story (1923) (Re-Issue): Musical; James Cagney, Virginia Mayo.

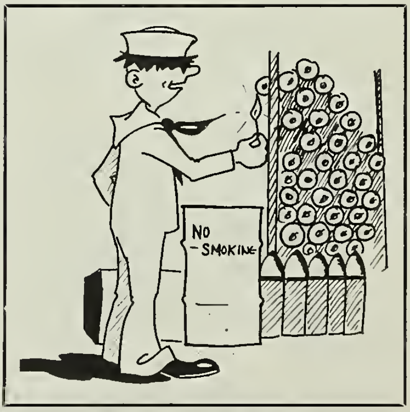
I'll See You in My Dreams (1924) (Re-Issue): Musical; Doris Day, Danny Thomas.

Bullfighter and the Lady (1925) (Re-Issue): Drama; Robert Stack, Joy Page.

Lady for a Night (1926) (Re-Issue): Melodrama; Joan Blondell, John Wayne.

Lover Come Back (1927) (C): Rock Hudson, Doris Day.

All-Navy Cartoon Contest
John R. Leszewski, SN, USN



"Hey Joe, you in here?"

The X-15 (1928) (C) (WS): Drama; David McLean, Charles Bronson.

Cash On Demand (1929): Melodrama; Peter Cushing, Andre Morell.

3 Stooges Meet Hercules (1930): Comedy; 3 Stooges.

One, Two, Three (1931) (WS): Drama, James Cagney, Horst Buchholz.

Summer and Smoke (1932) (C) (WS): Drama; Laurence Harvey, Geraldine Page.

The Outsider (1933) (C): Drama; Tony Curtis, Jim Franciscus.

Deadly Duo (1934): Melodrama; Craig Hill, Marcia Henderson.

Woman Hunt (1935) (WS): Melodrama; Steven Piccaro, Lisa Lu.

September Storm (1936) (C) (WS): Melodrama; Joanne Dru, Mark Stevens.

Underwater City (1937): Melodrama; William Lundigan, Julie Adams.

Lad: A Dog (1938) (C): Drama; Peter Breck, Perry McCay.

Light in the Piazza (1939) (C) (WS): Drama; Olivia de Havilland, Rossano Brazzi.

Swinging Along (1940) (C) (WS): Musical Comedy; Pete Marshall, Tommy Noonan.

A Majority of One (1941) (C): Comedy-Drama; Rosalind Russell, Alec Guinness.

The Roman Spring of Mrs. Stone (1942) (C): Drama; Vivien Leigh, Warren Beatty.

Television Programs

5244: TV-1 *Perry Mason* – Petulant Partner. TV-2 – *Stagecoach West* – Not in Our Stars.

5245: TV-1 *Perry Mason* – Watery Witness. TV-2 *Stagecoach West*—House of Violence.

5246: TV-1 *Perry Mason* – Fandancer's Horse. TV-2 *Stagecoach West* —The Outcasts.

5247: TV-1 *Perry Mason*—Shattered Dream. TV-2 *Stagecoach West* – El Carnicero.

5248: TV-1 *Perry Mason* – Bedeviled Doctor. TV-2 *Stagecoach West*—Arsonist.

5249: TV-1 *Perry Mason* – Artful Dodger. TV-2 *Rawhide* – Long Shake Down.

5250: TV-1 *Perry Mason* – Bartered Bikini. TV-2 *Rawhide* – Black Sheep.

5251: TV-1 *Perry Mason* – Spurious Sister. TV-2 *Rawhide* – Lost Tribe.

5252: TV-1 *Perry Mason* – Blushing

Pearls. TV-2 *Rawhide* – Hondo Seco.

5253: TV-1 *Perry Mason* – Buried Clock. TV-2 *Rawhide* – Inside Man.

5254: TV-1 *Perry Mason* – Stuttering Bishop. TV-2 *Rawhide* – The Send Off.

5255: TV-1 *Perry Mason* – Gallant Grafter. TV-2 *Rawhide* – Rio Salado.

5256: TV-1 *Perry Mason* – Frantic Flier. TV-2 *Rawhide* – Black Storms.

5257: TV-1 *Perry Mason* – Wayward Wife. TV-2 *Rawhide*–Incident of Fear: In The Streets.

5258: TV-1 *Perry Mason* – Glittering Goldfish. TV-2 *Gunslinger* – Road of the Dead.

5259: TV-1 *Perry Mason* – Perjured Parrot. TV-2 *Gunslinger* – The Recruit.

5260: TV-1 *Perry Mason* – Bashful Burro. TV-2 *Gunslinger* – Appointment in Cascabel.

5261: TV-1 *Perry Mason* – Corresponding Corpse. TV-2 *Gunslinger* – Buried People.

5262: TV-1 *Perry Mason* – Borrowed Brunette. TV-2 *Gunslinger* – Die Hard.

5263: TV-1 *Perry Mason* – Violent Village. TV-2 *Gunslinger*–Hostage Fort.

5264: TV-1 *Perry Mason* – Prudent Prosecutor. TV-2 *Gunslinger* – John Sergeant.

5265: TV-1 *Perry Mason* – Mythical Monkeys. TV-2 *Gunslinger* – New Savannah Story.

5266: TV-1 *Perry Mason* – Spanish Cross. TV-2 *Gunslinger* – Golden Circle.

5267: TV-1 *Perry Mason* – Jaded Joker. TV-2 *Gunslinger* – The Zone.

USAFI Observes Twentieth Birthday This Year

The United States Armed Forces Institute (USAFI) – the medium through which thousands of Navymen have continued, supplemented and/or completed their education while serving on active duty – is celebrating its 20th birthday this year.

In that 20 years more than five million students have enrolled in USAFI's correspondence courses in high school, college, technical and vocational subjects, as well as thousands of courses from the extension divisions of its 43 participating colleges and universities. Millions of others have attended group study classes in these subjects and in USAFI's elementary level and spoken language courses.

USAFI was originally called the Army Institute when it opened its Madison, Wis., headquarters on 1 Apr 1942. It offered 64 courses purchased from a commercial correspondence school, and hundreds of high school and college courses. By the end of 1943 it had expanded to include all branches of the armed forces, and in February 1943 it was renamed USAFI.

Since its inception, USAFI has worked in close cooperation with the University of Wisconsin, one of the major forces in university correspondence education for more than half a century. USAFI headquarters at Madison remains today the permanent repository for records of educational achievement by active duty servicemen, and is the only USAFI authorized to report this achievement to educational institutions and other interested agencies.

Navy Needs Candidates for Nuclear Power Training

If you can qualify and are eligible for nuclear power training, the Navy wants you to apply for such training – now. The need is urgent.

The nuclear power training schools at New London, Conn. (moving soon to Bainbridge, Md.), and Mare Island, Calif., plus the subsequent six months' operational training at a nuclear prototype site – Idaho Falls, Idaho; West Milton, N. Y.; or Windsor, Conn. – have recently been designated as equivalent to Class "B" schools for Navymen in the MM, EN and BT ratings. This schooling can be guaranteed to eligible Navymen reenlisting under the STAR program. Star reenlistees in pay grade E-4 will be advanced automatically to pay grade E-5 upon graduation. Enginemen completing this training will be changed in rating to MM in the equivalent pay grade.

Engineering ratings and the STAR program aren't the only potential sources the Navy hopes to tap either. If you're not in one of the source ratings now, you can, if eligible, request conversion in accordance with

WHAT'S IN A NAME

Master-at-Arms

There are few enlisted men in the Navy who haven't, at one time or another, had at least a minor disagreement with a master-at-arms. On the other hand, there are just as few men who haven't, at one time or another, been aided in some way by MAAs. They seem to have a knack for being available when they're needed.

No one seems to know when the first master-at-arms appeared in a Navy, but we suspect MAAs are as old as navies themselves. Records show, for example, that the Royal Navy had masters-at-arms as early as the reign of Charles I (1625-49). At that time, however, they were called sea corporals.

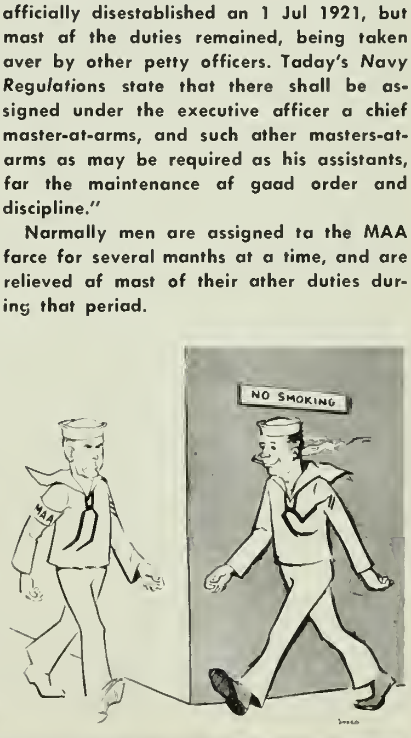
In those days they were custodians of all the swords, pistols, carbines and muskets. Among other duties — of which they had many — they had to see that the bandoleers were filled with fresh power before the crew went into battle. They also had to be qualified in close-order fighting under arms, and they led drills under arms for the seamen.

Records of our own early Navy show that a master-at-arms rating was established by an Act of 1 Jul 1797 and remained in effect until 1 Apr 1893, when the rating was broken down into three pay grades of chief, first class and second class.

The related rating of ship's corporal first appeared in the 1835 *Navy Register*, only to be abolished by an Executive Order in 1893.

As a specific rating, master-at-arms was officially disestablished on 1 Jul 1921, but most of the duties remained, being taken over by other petty officers. Today's *Navy Regulations* state that there shall be assigned under the executive officer a chief master-at-arms, and such other masters-at-arms as may be required as his assistants, for the maintenance of good order and discipline."

Normally men are assigned to the MAA force for several months at a time, and are relieved of most of their other duties during that period.



Para. 11.31a of the *Enlisted Transfer Manual.*

Eligibility for nuclear power school requires a GCT/ARI test score combination of 110 or more, or ATT Math of 53 or more. In addition, all requirements listed in Para. 11.3 of the *Transfer Manual* apply.

Navymen graduating from nuclear power training will in most cases be assigned duty in nuclear submarines and surface ships. Those not submarine qualified will also have to volunteer for, and complete, submarine school if they desire submarine duty. Surface personnel who are not assigned initially to nuclear billets will return to sea in the surface forces, forming a pool of qualified operators for eventual assignment to nuclear billets as needs increase.

So if you're interested in getting in on what can still be considered the ground floor of the nuclear Navy, see your CO. His endorsement will be needed on your request.

Here Are the Revisions Now in Effect on Officer Fitness Reports

Several changes in the officer fitness report program are now in effect throughout the Navy. In general, the changes involve:

- New Report Form—A new form – different in composition and content – became effective on 30 April.
- Fewer Submissions – For most officers, the new form is submitted normally only once a year. Warrant officers, ensigns and lieutenants junior grade will, as in the past, submit two reports each year. (Also, a report is submitted each time an officer or his reporting senior is detached.)
- Staggered Reporting Dates – A staggered schedule has been established for the submission of regular reports as follows:

Flag officers – When officer or reporting senior is detached.

Captains – 30 April.

Commanders – 31 May.

Lieutenant commanders—30 June.

Lieutenants – 31 July.

Warrant officers, ensigns, lieutenants (junior grade) 28 Feb and 31 August.

- Extended Reporting Periods – Reporting seniors may now extend the reporting period for a maximum of 60 days if the officer reported on or the reporting senior is to be detached from, or reports to, the duty station involved before or after a periodic reporting period.

Increased emphasis is being placed on each officer's qualities of personal leadership. The new form contains exact definitions for terms used in the evaluation – "outstanding" is defined as "one in a hundred," and "exceptional" is "one of the next top few." Other terms are "superior," "excellent," "acceptable" and "marginal."

The form also contains space for comments on the adaptability of the officer to the varying conditions of naval service, recommendations for future assignments and remarks regarding individual accomplishments. These comments will assist the Chief of Naval Personnel in the assignment of officers.

Annual submission of the report is expected to give officers involved a fair shake at demonstrating their abilities before any formal evaluation is made. At the same time, reporting seniors will have more time to observe the officers before making judgments.

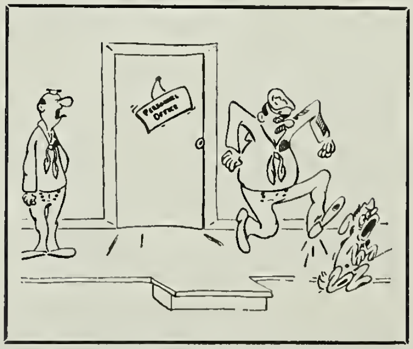
Extended reporting periods, in cases of officers who check into or are detached from commands, eliminate administrative reports which cover periods so brief they may not truly represent the officers' capabilities, or may simply repeat evaluations submitted in regular reports.

In the future, each officer will receive from the Chief of Naval Personnel a receipt which acknowledges receipt of the form in BuPers.

Incidentally, the changes in periodic submission dates were the result of an effort to gear performance reporting more closely to the usual convening dates of selection boards in order to ensure each board's having before it a more recent performance evaluation than was usually the case in the past.

The detailed procedure for completion and submission of the reports is contained in BuPers Inst. 1611.12.

All-Navy Cartoon Contest
Howard L. Allen, RM2, USN



"Hey Boats, yuh make Third?"

Here's Latest List of Correspondence Courses

Five new enlisted correspondence courses have been issued by the Navy Correspondence Course Center and 12 courses have been discontinued.

New Courses

Personnelman 1 and C (NavPers 91422-1C)
Radarman 3 and 2, Vol. I (NavPers 91267-1C)
Disbursing Clerk 3 and 2 (NavPers 91436-3A)
Aviation Ordnanceman 3 and 2 (NavPers 91665-1)
Construction Electrician 3 and 2 (NavPers 91569-2)

Discontinued Courses

Personnelman C (NavPers 91422-1B)
Personnelman 1 (NavPers 91421-1A)
Radarman 3 (NavPers 91266-1B)
Radarman 2 (NavPers 91267-1B)
Disbursing Clerk 3 (NavPers 91435-3)
Aviation Ordnanceman 2, Vol I (NavPers 91661-A)
Aviation Ordnanceman 2, Vol II (NavPers 91665-A)
Aviation Ordnanceman 3, Vol I (NavPers 91659-A)
Aviation Ordnanceman 3, Vol II (NavPers 91656-A)
Construction Electrician's Mate 3 (NavPers 91568-1A)
Construction Electrician's Mate 2 (NavPers 91569-1A)
Disbursing Clerk 2 (NavPers 91436-3)

Selection Boards Convene For Promotion of WOs

Selection boards which considered Regular and Reserve warrant officers for promotion during fiscal year 1963 convened in Washington, D. C., on 15 May 1962. The boards considered warrant officers who met the following date of rank cutoffs:

Grade	Date of Rank for Eligibility
W-1 to W-2	30 Jun 1961 or earlier
W-2 to W-3	30 Jun 1959 or earlier
W-3 to W-4	30 Jun 1959 or earlier

The announcement of the selection boards' convening date is contained in BuPers Notice 1421, which is dated 14 Mar 1962. Detailed regulations governing WO promotions are contained in SecNav Inst. 1421.2.

Here's a Taste of Navy Duty on the Aleutian Island of Adak

LET'S FACE IT: Adak is no paradise flowing with milk and honey. On the other hand, it isn't nearly so grim as your startled imagination might picture it. After all, people have been living there for years.

To help protect yourself during going-away parties, here's the story on living conditions aboard the Navy's Aleutian outpost, as told to ALL HANDS through the courtesy of Adak Naval Station. We can't vouch for the facts personally, as Adak is a little off our beat.

Adak, on which the Naval Station is located, is an island of the Andreanof Group, located in the southernmost part of the Aleutian chain. The country is rugged and mountainous, and although the island is covered with grass, it has no trees. There is neither a native population nor a civilian settlement or village on the island.

It has an average winter temperature of 33°F. The summer months of June, July and August are relatively mild, with the average temperature at about 44°F. The thermometer rarely climbs into the 70s. We suggest this would be a good season to write your friends in Guantanamo Bay and Panama.

The average rainfall is some 67 inches per year — which our correspondent assures us is less than in some states — but there are long wet spells. During the winter, snow and sleet flurries occur almost daily, although heavy snows are rare at the base. The mountains are covered with snow about eight months of the year.

The most disturbing part of Adak weather is the high wind. Gusts occasionally reach 40 to 60 knots or higher. Though these winds may sound extreme, they affect station life very little.

There are about 125 miles of roads on Adak. Most of them are not paved, but they are in fair to good condition. Buses cover all major parts of the station and run on schedule.

Autos — If you have a family you need an automobile and, under any circumstances, a car is highly desirable. No matter what your status, you are encouraged to bring your car, as other forms of transportation are limited. Climate and roads being what they are, choose one that has a minimum of chrome and gingerbread and that is in good mechanical condition. Repair and maintenance facilities are limited and if you can't get parts through normal mail order sources, you're going to walk. Snow or heavy-duty tires are recommended, and it is also advisable to have your car undercoated before it is shipped. Try to see that it is as waterproof as possible because it is going to sit out in the weather the year round.

Regular gasoline now costs about 21 cents per gallon.

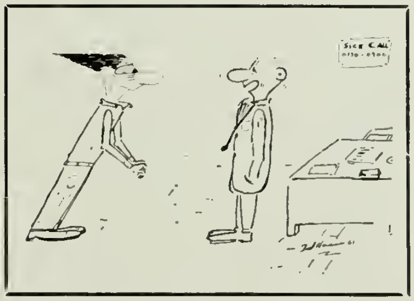
Transportation — You and your family may travel to and from Adak by government air or sea transportation at no expense to you. Dependent travel is authorized by the Commandant, 17th Naval District, when government quarters are available. Concurrent travel is rare because of the limited number of government quarters and absence of other accommodations for dependents on Adak.

The Commandant, 13th Naval District, will decide the method of transportation when your family's entry has been approved.

Housing — Married officers and married enlisted personnel of pay grades E-6 and E-7, and E-5 with eight years' or more active federal service, are eligible for government quarters. Waiting periods vary from three to six months. Two- and three-bedroom family units are available. Three-bedroom units are intended primarily for families with three or more children.

You'll find these items of furniture in your government quarters:

All-Navy Cartoon Contest
Peter A. Hansen, EN2, USN



"What makes you feel bow lookout watches are affecting you, Cornwell?"

Living Room: One divan, two end tables, two lamps with shades for end tables, two upholstered chairs (lounge type), two occasional chairs, one to three floor lamps with shades. coffee table, bookcase in some quarters, writing table or desk and rug with pad.

Dining Room: A gateleg table (dropleaf) or a dining table equipped with extension leaves, six to eight dining chairs, one built-in china cabinet or buffet, and one rug with pad.

Dinette: One dinette table and four chairs.

Hall: One telephone shelf and telephone, and rug with pad.

Bedrooms: One double bedframe with spring and mattress or twin beds with springs and mattresses, chair, chest of drawers, night stand, lamp with shade, vanity in master bedroom, large mirror, and rug with pad.

Laundry: One washer and dryer. Family rental quarters are limited and certain of these quarters are assigned to key billets. Waiting periods for others vary from six to 18 months depending on the rate of turnover. No waiting period exists for bachelor rental quarters.

Household Goods — Because of the lack of storage space, it is not possible to furnish storage for either government-owned or personal furniture, goods, or appliances, except in the quarters themselves.

All items you bring must be stored in your own quarters, and no government furniture allocated to those quarters may be removed. Most families consider that there is not enough room for both a deep freeze unit (preferably upright models) and an automatic ironer, although some find room for one or the other (usually in a bedroom). Couples without children can plan on having some extra space in the "spare" bedroom.

It is generally agreed that room can be found for one or more of the following items: Sewing machine, vacuum cleaner, record player, tape recorder. All these items, except sewing machines, are stocked at the Navy Exchange. It's a good idea to bring along sleds for children.

The surfaced areas, other than thoroughfares, are limited, a factor which should be considered in deciding whether or not to bring tricycles, bicycles and similar items. Personal furniture and appliances which are similar to government-furnished items, and other items for which you will not have room should be placed in storage in the United States. Such storage is furnished at government expense.

A limited quantity of china, kitchen utensils and bedding is available until your own arrives. Bring: Table silver, linens, wastebaskets, TV set, kitchen utensils, drapes, radio (regular broadcast and/or short-wave), curtains, ironing board, table chinaware, small kitchen appliances, pictures, blankets, pillows, and vacuum cleaner.

You should contact the Household Goods Section of the nearest supply activity for information regarding transportation of dependents and the shipment and storage of personal effects and household goods. Ask for Bureau of Supplies and Accounts Publication 380, entitled "It's Your Move!" The Household Goods Section will be glad to give you the latest information regarding entitlement and such other advice and suggestions as you may desire.

Household goods are normally shipped through the Naval Supply Depot, Seattle. Authorization from Commandant, 17th Naval District, is required.

When permission has been received, the nearest Household Goods Section should again be contacted for the latest information regarding movement of your goods to Adak and/or to non-temporary storage. In general, three separate shipments are authorized:

- Expedited shipment, including the things needed upon your arrival — essential household goods and seasonal clothing.
- Shipment to non-temporary storage including furniture and items not required.
- Freight shipment to Adak, in which you should include the balance of small appliances, extra clothing and household goods.

The shipments destined for Adak, particularly the advance shipment, should be made available to the packers as soon as possible after you receive authorization to travel, so that they will arrive at Adak at the earliest possible date.

"No! No! No! Seaman Bulkhead! . . . And we worked so hard to get it!"

Personal Clothing — Adak is not a perennial icebox. Your present clothes, with a few exceptions, should prove adequate. Emphasis should be on water and wind repellent fall-weight clothing, because the summer is comparatively cool and the winters only moderately cold. A warm overcoat or parka is a must, as are heavy-soled shoes, raincoats, galoshes and headgear. Heavy clothing is not needed for daily routine living, but bring woolen suits, sweaters, heavy socks and warm gloves. For the children, ski suits and parkas are ideal, and extra mittens are advisable. Bring summer clothes, slacks, pedal pushers, swimming suits, and hats. Evening gowns and dinner jackets are desirable for occasional formal parties.

The local shopping center is limited to a Navy Exchange and only limited stocks of clothing are available. However, a women's and children's ready-to-wear section has recently been established. Ranges of styles and sizes of shoes are quite limited. Yard goods are stocked with zippers, buttons, thread and other notions.

Mail Order Service — Mail order service from the Washington-Oregon area is available and widely used. Shipping time by this service is approximately four to six weeks.

School — Schooling extends from kindergarten through the 12th grade. Diplomas issued from the high school are acceptable in any state institution of higher learning in other states. Courses not offered by the high school are furnished by correspondence courses.

The quality of instruction in both the elementary and high school grades is considered excellent, and there are seldom as many as 30 students in a class.

The school building is modern and warm and is located near most of the housing areas. Transportation is furnished. The Naval Base makes several of its facilities, such as the gym and the swimming pool, available for school use during school hours. Alaska law requires a child to be five years old before 1 November of the school year in order to enter kindergarten any time during the school year. To enter the first grade, the child must be six before 1 November or have already entered first grade in a public school in another state and arrive on Adak after 1 January.

Churches — There are Protestant and Catholic chaplains on Adak and religious services are held regularly. Complete programs of religious education are offered.

Recreation — Recreational facilities are widespread and varied. Special Services offers a 10-lane bowling alley, gym, roller skating rink, weight-lifting room, indoor archery range, motion picture theater, swimming pool, hobby shops, billiard and table tennis rooms, library, ski lodge and indoor rifle range. A new gym and an eight-lane bowling alley were recently completed.

Special Services also has appropriate athletic gear available for issue for the following activities: Archery, badminton, basketball, bowling, skiing, snowshoeing, softball, table tennis, tennis, tumbling, wrestling, volleyball and assorted games. For year 'round swimming, an indoor pool is located in the Bering Recreation Building. The Fletcher Library boasts more than 14,000 volumes with a wide distribution of subject matter, as well as current popular magazines. The Bering Theater offers a matinee on Saturday and Sunday and two shows nightly. A new ski lodge is to be constructed.

There are several clubs for the use of authorized personnel, including an Officer's Club (Hammerhead Lodge); Club Caribou (CPO and Civilian); Enlisted Men's Club (Club Bayview); and Marine Barracks (Tundra Tavern).

There are two package liquor stores for the convenience of authorized personnel, one operated by the Navy Exchange, and one by Hammerhead Lodge.

A popular recreational activity on Adak is the Hobby Shop. There are automobile repair, photographic, leathercraft and carpentry sections. Model making and lapidary work are also performed there.

Hunting and Fishing—Other than for ptarmigan and a few geese and ducks, there is very little hunting on Adak. Fishing is fair to good in the area, with salmon and trout fishing very popular. Recreational leave may be taken to the mainland of Alaska for abundant hunting and fishing.

Radio and Television—Adak has an Armed Forces Radio and Television outlet which broadcasts not only important local announcements and events, but also many of your favorite stateside radio and television programs. In addition, many stateside programs may be received on shortwave radio.

Pets—It is strongly recommended that pets not be brought. All cats and dogs must have shots and must be registered with the Security Officer. Dogs must be leashed except when in private quarters.

Medical Care — Medical facilities are available to military and dependent personnel on Adak. For dependents there is a maternity clinic and general medical clinic, but laboratory tests and drugs are limited. Dependents under special medical care are advised that there are no specialists on Adak.

Necessary dental work is performed by appointment for military personnel. Dental treatment is also available for military dependents, but on a deferred priority basis.

U. S. Mail Service—Adak has a Navy Post Office which provides all services available in any U. S. Post Office except Postal Savings and COD service. First Class and Air Mail arrive on the island at least weekly; newspapers, magazines, and parcel post packages are received once or twice a month by ship.

Navy Exchange — The Navy Exchange operates a retail store, a commissary which is well-stocked, a tailor shop, cobbler shop, various snack bars, barber shop, beauty shop, laundry and dry cleaning plant, garage and service station. The Exchange also offers radio, television, and watch repair service.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 8 — Announced forthcoming instructions for the preparation and submission of officers' fitness reports.

No. 9—Removed restrictions on travel of Department of Defense sponsored dependents to Western Europe.

Instructions

No. 1520.20B—Announces eligibility requirements and invites applications for heavier-than-air flight training of commissioned officers and officer candidates leading to designation as naval aviator.

No. 1560.10C—Supersedes BuPers Inst. 1560.10B, and updates details of the operation of the Navy's Tuition Aid Program for active duty personnel.

No. 1611.12—Details new instructions for the completion and submission of reports on the fitness of officers.

No. 1412.6A—Announces the temporary appointment of certain ensigns to the grade of lieutenant (junior grade).

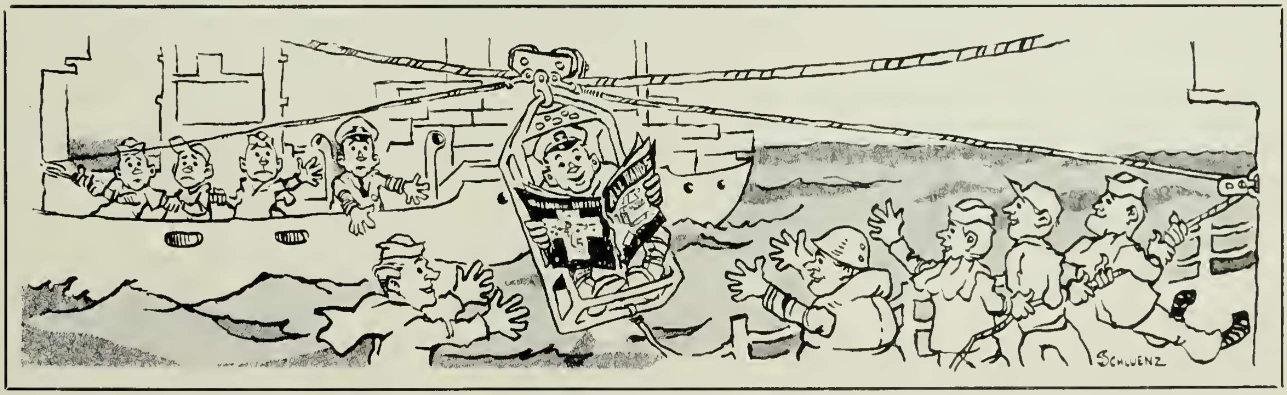
Notices

No. 3590 (30 March)—Announced the schedule, rules and procedures for the 1962 Navy championship rifle and pistol competitions.

No. 1440 (3 April) — Outlined changes in the Navy Enlisted Rating Structure involving disestablishment of the Oceanographer (SOO) Service Rating, and provided advance information concerning the Aviation Antisubmarine Warfare Technician (AX) General Rating.

No. 1430 (4 April) — Announced advancements to chief petty officer, acting appointment.

No. 1520 (17 April) — Discussed the scope of the Academic Year 1963-64 Postgraduate Educational Program.



DON'T HOLD UP the line—Nine other eager Navymen are pulling for this copy of ALL HANDS magazine.

DECORATIONS & CITATIONS

LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ de Vicq, David C., LT, CEC, usn, for service from 1 Jul 1960 to 20 May 1961 as officer in charge of a special detail, Summer Support Activities, Construction Battalions, U. S. Atlantic Fleet. Assuming duties of great responsibility in deploying with 60 men on a polar ice cap to begin construction of the Marie Byrd Station in Antarctica, LT de Vicq, along with his men, worked for 72 hours without sleep, in temperatures 35 degrees below zero, in order to provide water, food, and shelter for the unit after arrival at the ice cap. In addition, assembly of a 138,000-pound Peter Snow Miller was accomplished, without machinery to repair damaged parts, or power equipment to handle parts weighing up to 10 tons. The world's largest Jamesway hut was then constructed by original field design when specially ordered material failed to arrive. Through LT de Vicq's excellent leadership, technical ability, and skilled supervision, Marie Byrd Station became available for limited operations in less than six months after his arrival on the site.

★ Kingston, James R., CAPT, MC, usn, for service from 1 Jan 1959 to 31 Dec 1961 as Head of the General Medicine and Surgery Research Branch, Bureau of Medicine and Surgery, Washington, D. C. Recognizing the serious loss of training time engendered by epidemics of respiratory diseases among recruit populations, CAPT Kingston conceived, planned, organized and directed a scientific study of the U. S. Marine Corps Recruit Depot, Parris Island, S. C. As a result, the Eaton Agent was identified as the prevalent causative organism in primary atypical pneumonia. It was also established that the administration of demethylchlortetracycline provided an effective treatment. This knowledge will materially reduce the time lost due to illness during recruit training.

★ Tucker, Robert F. LT, usn, for services from August 1959 to April 1961 while serving with Heavy Attack Squadron Three, Naval Air Force, U. S. Atlantic Fleet. Exercising unusual initiative and technical skill, LT Tucker achieved signal success in the vital field of airborne radar prediction by designing and building a radar prediction device, the use of which immeasurably increases the bombing capabilities of all heavy attack squadrons. With production models reaching the Fleet in the short span of 16 months after the production of his prototype, LT Tucker has contributed materially in advancing the capabilities of heavy attack squadrons to achieve their missions.

Gold Star in Lieu of Third Award

★ Mendenhall, William K., Jr., RADM, usn, for the performance of outstanding service from August 1960 to January 1962 as Deputy Chief of Staff, U. S. European Command. In carrying out his responsibilities, Rear Admiral Mendenhall made a significant contribution to the successful accomplishment of the many joint activities of the U. S. European Command, attaining a high degree of coordinated effort among the divisions of the command. In developing inspection procedures for the Military Assistance Advisory Groups and Missions under the jurisdiction of the U. S. European Command, and in his active participation in the inspections, he displayed unusual ability. His personal and official relationships with the military and government officials of the host countries during his inspection visits were marked by cordiality, confidence and great respect, resulting in an enhancement of the prestige of the United States and her armed forces.

NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ Crescitelli, Peter A., DT3, usn, for heroic conduct on the early morning of 26 Mar 1961, while serving with Marine Air Base Squadron 26, Marine Aircraft Group 26, MCAF, New River, Jacksonville, N. C. Upon learning that one of the homes in the vicinity was on fire, Crescitelli immediately rushed to the scene and discovered that two small boys were trapped in the blazing structure. Although warned that the roof might collapse at any moment, he entered the house and managed to grope his way through the dense smoke until he located and removed to safety the unconscious form of a six-year-old boy. He then skillfully administered artificial respiration to the victim until normal breathing was restored. By his prompt, skillful, and courageous actions in an emergency, Crescitelli was directly responsible for saving a life.

★ Harrison, Joseph J., BM1, usn, for heroic conduct on 2 Dec 1961 while in a liberty status from the U. S. Naval Security Group Activity, Bremerhaven, Germany. When a shipmate accidentally stepped into a silted mud hole while duck hunting, and was slowly being engulfed in a quicksand-like action, Harrison immediately went to his aid, fully realizing the personal danger involved. During the following two hours, he singlehandedly struggled to release the stricken man, finally succeeding a short time before darkness fell and the tide began to flood. By his prompt and heroic efforts, Harrison undoubtedly saved the life of his companion.

BRONZE STAR MEDAL

"For heroic or meritorious achievement or service during military operations . . ."

★ Clapper, Lloyd R., BU1, usn, for meritorious service as Assistant Fire Chief and Second in Command of the Fire and Rescue Crash Crews at the Naval Air Facility, Tinian, Marianas Islands, during the year 1945. With the crash crews called upon frequently during this period of intensive air operations, Clapper carried out his responsibilities with outstanding courage and resourcefulness, contributing materially to the saving of lives and equipment. On one occasion when a B-29 aircraft crashed and was in imminent danger of exploding, Clapper, along with an assistant, chopped through the back of the burning plane and succeeded in rescuing a victim who was trapped in the forward upper gun turret. On another occasion, when a crew member of a burning aircraft parachuted and landed in a swamp a few seconds after his parachute opened, Clapper and two of his men rushed to the scene and saved the man from drowning. By his prompt and effective rescue efforts throughout this period, he contributed greatly to the success of his unit.

BOOKS TRUTH, FICTION AND MYTHOLOGY INCLUDED IN THESE SELECTIONS

Lots of new books, of all types, have rolled off the presses. From this group a sizable number have been chosen for ship and station libraries. You'll find they have some exceptionally good selections. A few of the new titles available are listed here.

We can't think of a better lead than **Navy Diver,** by Joseph S. Karneke and Victor Boesen. Karneke is a veteran of 20 years of Navy diving and he and Boesen know how to make the most of them. Relaxed and irreverent, *Diver* tells of salvaging wrecks at Pearl Harbor, fighting sharks in Australia and the Philippines, and participating in the Bikini bomb tests. Karneke was master diver when the U. S. Navy found the unsinkable Japanese cruiser *Nachi* at the bottom of Manila Bay. He tells how he and his diving crew inspected the sunken ship to learn its remarkable construction, then found war plans and diaries that changed the course of the war in the Pacific. Fascinating reading, and guaranteed to increase requests for diving duty. Try it. You'll find the names of a number of ships you may have served on at one time or another.

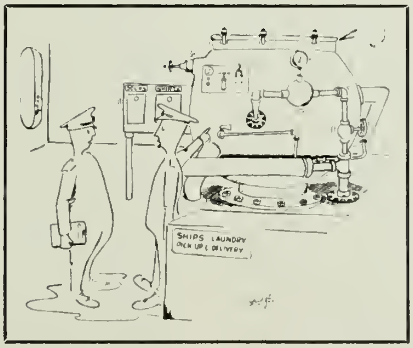
Hazard, by Marc Parrott, is also a brisk little number. Ever since their founding — so it is said — in a Philadelphia bar in 1775, the Marines have always been good box office. Parrott has selected the cream of the many incidents which make up Marine lore and, at the same time, manages to avoid telling for the umpteenth time the story of the island invasions of World War II. Parrott begins with the adventures of Marines captured by Barbary pirates, tells of the wanderings of sea-soldiers on the frigate *Essex,* Fremont in California, Haitian bandit days, a little-known spy incident in the Pacific and, of course, the fabulous Lou Diamond. All this sounds like mythology, but it isn't. It's for real.

This provides a logical tie-in for the next title — **The Medal** (which is, of course, the Medal of Honor), by Frank Donovan. In 1862, Congress established the Medal of Honor to be given for "a deed of personal bravery or self-sacrifice above and beyond the call of duty while a member of the armed forces in actual combat with an enemy of the nation." The rules have been changed somewhat but Donovan tells the story of the Medal and the exploits of some of the men who won it. From the Civil War through Korea, deeds of courage have been performed by drummer boys, messengers, soldiers, sailors, pilots and Marines. He doesn't try to cite them all, but he gives good coverage.

Fiercest Battle, by Ronald Seth, is another hair-raiser. It's the story of a convoy across the Atlantic at the peak of the U-boat warfare. The passage of ONS 5 is reconstructed hour by hour as it made its slow way through raging seas, dense fog and ice floes and, all the way, fought its way against the U-boats. Against this convoy Admiral Doenitz concentrated the full operational strength of his U-boat fleet. Losses were great on both sides, but by the end of the journey the menace had finally become contained. Why this particular convoy should have made history is the theme of the book.

Enough of violence. Let's become thoughtful for a moment. **The Rich Nations and the Poor Nations,** by Barbara Ward, will give you reason for plenty of thought. Among all the revolutions that have changed ideas, she sees four as most important — the revolution of equality, the concept of material progress, the biological revolution, and the application of science and capital to the economic progress of nations. These the rich nations have achieved, but not the "emerging" nations. They have come to identify these factors with freedom but, as they see it, only Communism promises to make these available to them within a reasonable time. They fail to realize the penalties attached to such promises. The richer Western nations can do something about this, and author Ward suggests a possible course. Provocative.

All-Navy Cartoon Contest
Stanley J. Rudge, ADJ2, USN



"...and this is the machine that pulls the buttons off the shirts and shoots them through the socks."

It is easy for the have-not nations to forget that the wealthier, more stable nations have had their growing pains, too, and that from earlier travail has come present-day respectability. **The Last Plantagenets,** by Thomas B. Costain, is a reminder of that period of English history which can be best described as "tumultuous." It is the fourth and concluding volume of his *The Pageant of England,* and covers the period from 1367, when Richard II was born, to 1485, when Richard III was killed on the field of Bosworth. As those who have read his earlier works know, Costain is a sound scholar, but he is not interested in the matters such as rent rolls, feudal legal practices, trade guilds and the monastic system, which appear to attract so many of his colleagues. He prefers the color, drama and pageantry of the period and is more eager to describe the personalities and triumphs and disasters of hero and villain, whoever they may be. This he does with superb skill—as he should. He's been at it for years.

Another historical number with greater emphasis on the fictional treatment is **The Bull From the Sea,** by Mary Renault. This is something of a continuation of her earlier *The King Must Die,* and carries along the story of Theseus' adventures from the time of his return to Athens after slaying the Minotaur. Instead of interpreting Theseus as an opportunistic gangster, as many of her predecessors have done, she depicts him as an intelligent, rational being as well as a great warrior and a fabulous hero. A painless introduction to one of humanity's great myths.

The Sea Officer, by Showell Styles, is in a somewhat more popular vein, based upon the career of Edward Pellew, one of England's 18th century sea dogs. In it you can follow his brisk fortunes from midshipman to admiral with sea fights galore.

A note to history buffs: Volume 15, the supplement and general index of Samuel Eliot Morison's (RADM, Ret. USNR.) **History of U. S. Naval Operations in World War II,** has been published recently.

WW I SPEEDBOAT CREW — As member of the First Squadron, Machinist's Mate Hildreth poses at right.

OVER THERE - WORLD WAR 1

ALL HANDS SPECIAL SUPPLEMENT

During World War I, a U. S. Naval Air Station was established at Dunkirk, France. Because of the frequent crashes of the early type planes used, the forerunner of our more modern crash boats was introduced. The author of this journal, Alanzo O. Hildreth, was a machinist's mate on one of these boats, and his comments provide an excellent picture of the role of the unsung heroes of an earlier day.

The following report is excerpted from the original journal of Alanzo O. Hildreth. It was made available to All Hands *through the courtesy of LTJG Robert Carlson, Jr., USNR-R, Minneapolis, Minn., and Reed Hildreth, St. Paul, Minn., the son of the author. Credit is also due to CDR Arthur E. Solberg, USNR, of NAS Minneapolis, Minn., who lent valuable assistance.*

Alanzo Hildreth entered the Navy as a landsman, advancing rapidly to the rating of machinist's mate, scheduled to be attached to an aviation unit. After a stint as a military driver in France, he was attached to a crash boat unit assigned to rescue downed airmen and salvage aircraft. He was promoted to machinist's mate first class before the end of the war.

Because of the nature of his assignments Hildreth saw more of the air war in World War I than the average military man. Typically, he discusses little of his daily work, but provides an interesting picture of what he saw about him. This account therefore represents a rarely to be seen personal document of a Navyman in the first World War.

It should be noted that personal journals and daily diaries in time of armed conflict are now prohibited because of the possibility of their falling into the hands of enemy personnel.

Oct. 26, 1917—3:45 P. M.—Left Aberdeen, South Dakota, over the P & N. W. R. R. for Omaha, Nebraska. Ate supper at Huron, South Dakota, at 7:30 P. M. Left Huron at 10:00.

Oct. 27 — Arrived at Sioux City, Iowa, at 5:30 A. M. Omaha at 10:00 A. M. Enlisted at induction center in Omaha. Left Omaha for Chicago, Ill., at 3:55 P. M.

Oct. 28 — Ar: Chi at 7:25. Took a little walk out on the lake front. Was again on my way at 10:45 A. M. over the B & O R. R. Ar: at Akron, Ohio, at 7:05 P. M. Pittsburgh, Pa., at 12:02 A. M. Shenandoah Junction, W. Va., at about 7:00 A. M.

Oct. 29 — Went through Harpers Ferry, W. Va., at 9:00. Also saw the old canal and the place where the first shots of the Civil War were fired. Our train ran within sight of the Cumberland River for nearly an hour. Ar: at the Navy Yard at Philly at 1:30 P.M. Got my exam at once. Also my uniform.

Oct. 30 — Raining. Rope drill until 10:30. Nothing doing all the rest of the day.

Oct. 31 — Nice and clear. But a little cold. Drilled about an hour. Reported at Hdqt and signed up for a draft going to Liverpool, England.

Nov. 1 — Getting ready to sail. Have drawn everything I need.

Nov. 2 — Weather fair. Reported at Hdqt and got Red Cross sweater and gloves. Went into town tonight. I suppose it will be the last time for several days too.

Nov. 3 — Packed our bags at 5:00 A. M. Ate at 6:00 A. M. Left Philly at 8:15 A. M. Ar: at New York at 10:00. Went on board ss *St. Paul* at once. Sailed at 12:30. Saw our last sight of good old U.S.A. at about 4:00 P. M.

Nov. 4 — Fairly calm weather cloudy and cool. Am just a little sea sick, not bad tho.

Nov. 5 — Storm, and sea running high. Altho the ship is rolling bad I am not sick, just feel funny.

Nov. 6 — It is still storming — everything all O. K. tho.

Nov. 7 — Well our storm is over and it is as calm as a mill pond. We are on board one of the fastest ships of the White Star Line altho she is an old-timer. No other ships with us. Since the beginning of the war she has made more trips than any other ship in the mail service.

Nov. 8 — Fair and calm again. The ship had target practice today for about an hour. Haven't seen anything that looks like a sub. Haven't seen anything but water for five days.

Nov. 9 — Cloudy and a fair wind blowing. Saw a tramp steamer today. It was a freighter. It is only the second one we have seen but couldn't tell what the other one was.

Nov. 10 — Clear and calm. Passed another ship at noon today. Our convoy met us at 4:00 P. M. today and it sure did seem good to see our flag on them. There were two, the *J. Jones* and *Cunningham.*

Nov. 11 — Clear, calm and a little colder than it has been. Think it is because we are getting near land. When I got up this morning there were nine subchasers around us. We have an idea that they saw a sub, as they were bunched up. Subs don't stick around long where they are. I suppose they were going to meet some other Allied ship. And again they may have just been scouting. Nothing of interest, as usual.

Nov. 12 — This morning saw the first land for eight days, and it looked good too. Could see lights on shore about 4:00 A. M. We came into Liverpool by the St. George Channel, just off the noted rock-bound coast of Wales and South of Ireland. Liverpool is sure a quaint-looking old city. Nothing like our cities, no skyscrapers. The streets would break a snake's back to follow them. Two-story street cars, and R. R. trains that look like toys. Women doing at best half of the work every place outside, and altogether in the stores. The traffic is nothing like ours. I suppose the war has a great deal to do with that tho. Altho it does not look to me like they could handle it at any time. We landed at 11:30 A.M. We marched from the docks to the R. R. station, where all of the seamen who were with us left for Queenstown, Ireland. Then they let the rest of us see what we could of the city till 11:00 P. M. At 11:55 we left for Southampton, England, over the London & Northwestern R. R. by way of London. Some cold in this train too.

DUNKIRK HARBOR—Picture taken from DD flying boat gives bird's-eye view of hangars and planes.

Nov. 13 — Ar: at London 8:15 A. M. Got off the train at the first stop in London, and took the famous underground tube to the main station. Ar: at 9:15. Had a Red Cross lunch there. At 11:50 we are again on our way toward France. We arrived at Southampton in about two and one-half hours. We went on board a ship at once for Le Havre, France. Sailed in about an hour. Went out a little way and anchored just outside of the harbor. Stayed there all night on account of fog.

Nov. 14 — Still in channel this morning when we got up. Got very little sleep tho. We had short eats too, canned bill and hardtack. Went back to the docks at Southampton at 11:00. Let us go ashore for about an hour. Sailed for Le Havre again at 4:30 P. M. We can see the searchlights playing over the city. They are sure powerful. There are about 200 English troops, 300 American soldiers and 50 of us on board. It's some sight to see all the troops of different countries on their way to France.

Nov. 15 — Landed at Le Havre this morning at 7:00 and marched about two miles to No. 2 rest camp. If this is what they call a rest camp I don't think I care to rest. Got a little bread and tea for dinner. Haven't had a good meal since I left the States. Put up our hammocks in an open shed and had a real good sleep. Saw my first aircraft guns at practice and airships in the air. We have orders to leave here at 3:45 A. M. this morning for Paris.

Nov. 16 — Left rest camp this morning at 4:00. Marched two miles to station. 6:00 A. M. we are on our way to the great city of Paris. Ar: at Paris at 3:15 P. M. Twenty-five of us stayed here and 25 went on to Dunkirk. We are staying at Hotel de Strasbourg. Am at the U. S. Navy Club writing letters home for the first time in three weeks.

Nov. 17 — Reported at Headquarters at about 11:00 A. M. Came downtown, had supper, then went to the soldier's club and heard Miss Johnson, an American girl, sing. She has sung in the trenches. The club is on the Palais Royal. Our Hq is at the old Palama Hotel. We can see the Eiffel Tower from there. Weather clear and warm today.

Nov. 18 — Reported as usual. Looked all over town for the Y. M. C. A. Hotel so I could get some money changed. Found it at last. It's a long ride on the sub-

BAM! FOR LUCK — Almost every plane had some good-luck charm or mark to assure a safe mission.

way to HQ from our hotel. Think I will stay in tonight.

Nov. 19 — Reported at 9:00 A.M. and have been taking in some of the city this forenoon. Am on as extra driver at Area HQ but have not had any work as yet.

Nov. 20 — Everything as usual. Went to the Y. M. C. A. Hotel and got some smoking (tobacco). Cloudy and damp.

Nov. 21 — Raining today. Haven't done a thing since I landed here but eat and sleep. We expect to go to some aeroplane shop or rather a school. Don't know when, altho I may stay here and drive a car.

Nov. 22 — Same old thing. Raining again.

Nov. 23 — Did nothing but sleep and look around the city a little.

Nov. 24 — Moved from the Hotel Strasbourg to a new place run by an American woman. It is a fine place. Hotel Pension de Famille on the Rue Camarosa. Ten francs per day. There were a bunch of American girls staying there.

Nov. 25 — Sunday. Reported at 10:00 A.M. Reported to LT Van der Veer and started driving a Ford. Drove all day. Reported after supper and went to the Gare du Nord station. It was about 12:00 when I got to bed.

Nov. 26 — Reported at Hdqt at 9:00 with car for duty. Drove all day till 7:30 P.M.

Nov. 27 — Drove Lieut Howes to the Chergit Blin Aero shops. Saw my first scout planes in the air today. Drove Paymaster McKay this afternoon. Helped him transfer 100 men from one station to another all the way across the city.

Nov. 28 — Drove out to the Haurue Aero factory where they assemble the bodies of the Clergit planes. Also went to the Clergit factory. Received orders to get ready to go to Dunkirk, France. They say it is some live place. Get bombed every night. Left gay Paris at 7:25 P.M. on our way for the land of air raids and bombs.

Nov. 29—Ar: at Calais at 7:25 A.M. Only stopped there for a few minutes. Are on our way again at 7:35. Ar: Dunkirk at about 10:00 A.M. Marched to the camp and had Thanksgiving dinner. Some dinner too: Hardtack and canned bill. Coffee while the siren blew, but we had no raid.

Nov. 30 — Friday — Got up at 6:15 A.M. We are quartered at an old hotel, but everything is a wreck here. Sure looks like something has hit this town. Well, guess something has — bombs and big shells. It is about a mile from our barracks to the camp. It is on the docks and the wind from the north is sure cold and damp. We are putting up hangars. There are two already.

Dec. 1 — Everything about as yesterday only it is raining a little. No planes in the air. Yesterday it was full of them. Two big gunboats came in today. This is a base for subchasers and fast motorboats. We are about 16 miles from the front here. Can hear the guns from camp all day.

Dec. 2 — This is Sunday and we had a half day off. It is cold. Some of the boys went out to a little town near the lines. They say it is not torn up near as bad as this city. And the people haven't left there like they have here. Think it is on account of this being a seaport. Our camp is very near a shipyard and they are building a big ship. It is nearly finished.

Dec. 3 — Windy again today. Started to blow the canvas off one of our hangars. I worked all the morning fixing that. This afternoon I saw a big church that was hit by a bomb. It was a wreck. It doesn't look like there is a whole window in town.

Dec. 4 — Cold and clear . . . Snowed for about ten minutes. The first snow since we have been here. This is a wonderful harbor. Went through the locks today in a motorboat. [*Hildreth was undergoing indoctrination in preparation for his assignment to a crash boat crew.*]

Dec. 5 — We had a real raid last night. Had alarms at 2:00 A.M. and again at 5:00 A.M. Only heard five bombs. It is reported that there were five or six killed and some damage done. There were several French planes up.

Aerial attacks on the naval base at Dunkirk were frequent. The bombers usually carried two 50-pound bombs mounted in wing brackets, or one 100-pound bomb mounted in the same manner under the fuselage. The bombsight consisted of two cross hairs mounted above each other on the side of the plane. When a bomb run was started, the observer armed the bombs manually by pulling out their cotter pins. When the cross hairs matched over the target, the bombs were released by opening the brackets with a lever. As of 4 Jul 1918, 159 bombings of Dunkirk had been recorded.

The attackers took such a liking to strafing that the Navymen at Dunkirk set up machine guns on the docks to catch them as they made their low-level passes after they had dropped their bombs.

Dec. 6 — Fritz kept us so busy that we didn't sleep much. Got us up at 3:00 A.M. and again at 5:00 A.M. At noon today a German plane came over taking pictures. The only danger is from the falling pieces of bursting shells that are shot at him. Our camp is called the "Bull's-eye" because the guns are all centered over here. We are getting shelled now.

Dec. 7 — Nothing to bother us last night as it was cloudy, so got some real good sleep. Cloudy and windy today. We have about 15 planes here now.

There are five big DD bombing boats and 10 HD scouts. Was going to try one out today but it was too windy. Raining tonight.

The single-seat French Oriole *was a scout plane used extensively by the First Naval Air Squadron at Dunkirk. Its top speed was about 120-130 mph. It was armed by two Vickers machine guns firing forward through the propeller. At this stage of the war, aviation had progressed well beyond the rock-throwing stage, and synchronized firing had become a reality, although every now and then a prop was shot away. These aircraft were used primarily for scouting missions with or without cameras. The remainder of the squadron was made up of the French DD flying boats.*

Almost every plane had some special marking or good-luck charm attached to it somewhere. LT Bamberry, for example, had a large "BAM" stencilled on the fuselage of his plane.

Some pilots were quite reluctant to fly if they lost their good-luck charm. They needed all the luck they could get. LT Wardwull had his charm with him, and escaped with only a good wetting after he was catapulted out of his plane when an outgoing freighter set up a wave that caught one of his pontoons while he was landing. Others were not so lucky.

Dec. 8 — It was cloudy and rainy last night. Were going to try out a plane but had motor trouble. I was outside of the city walls today. It sure has got some walls and forts around it. It looks as if it had been a beautiful city in peacetime, but the parks and buildings are all torn up from bombs and shells. One of the pilots at the French base about a quarter of a mile from us was killed. He was trying to land and hit the mast of a ship. He was not killed at once, but died as they got him out of the water.

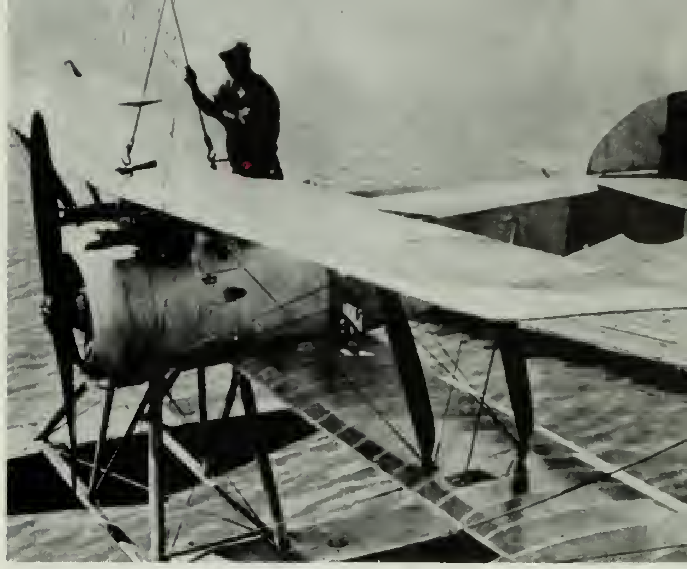
Dec. 9 — Sunday again. It rained today, so didn't get out of the barracks much. One good thing tho — don't think we will have a raid.

Dec. 10 — Nice and clear today — warm too. Took a ride to town this morning. We are building some dugouts at camp. Two other boys and myself were going up town while there was an air raid, and we saw a woman and a little child on the street. Just as we got up to them the woman fell in a faint on the very street. It was so dark that we couldn't see anything, but at last we found a drug store and a doctor and we carried her there. She had fainted from fright of the raid. It certainly was a mournful sight.

Dec. 11 — Had three alarms in 45 minutes last night. Lots of firing but don't think there were any bombs dropped here.

Dec. 12 — Last night was clear and still but no raid. Things have been pretty busy at the front for the last three days. We can hear the firing real plain. It's just a steady roar. We had an early raid tonight. The siren blew at 7:00 P.M. The AA guns put up a barrage for about 15 minutes, altho there were no bombs dropped near us. Suppose they will be back before long. Saw some German prisoners today at a prison camp. Most of them were very young. Some looked as young as 15 or 16, and they must have been taken at least six or eight months ago.

Dec. 13 — We had another of those raids last night, or rather two of them. One at 7:00 P.M. and again at 2:45 A.M. No damage done that I have heard of. It is reported that there were nine bombs dropped at St. Pol a small town just outside of this place and some damage was done. Don't know how much tho.



MACHINIST'S MATE HILDRETH works in the cockpit of French *Oriole* scout, used extensively by Navy.

Dec. 14 — Nothing doing last night. Cloudy. The French are bringing in a lot of small scout planes that have been wrecked at the front and are loading them on flat cars at our station to be shipped somewhere to be repaired. There are at least 15 or 20 of them. They are sure wrecks too.

Dec. 15 — Weather cold and windy. Drove out to a sawmill. It's funny to see how they do things here. Nearly everything done by hand. Two raids last night.

Dec. 16 — Sun. Didn't get up till 7:30 this morning. Was out sight-seeing today and took in an English movie shown here in town for men in the service. The pictures were all American. Had a Charlie Chaplin comic.

Dec. 17 — Nothing doing of importance. No raids. Weather cold and windy. Had a real South Dakota snowstorm. It lasted from 4:00 P.M. till 5:30. Raid alarm at 7:15 P.M. It was all noise tho. At least nothing happened. Don't think they came over.

Dec. 18 — This was a real winter morning. The ground was frozen hard, but by noon it had warmed up a great deal. Another raid tonight and a real one too. The worst one we have had. The French seaplane was set on fire. Three or four hangars were burnt. We went over to help put it out, and it was raining steel all the while from the guns.

Dec. 19 — There were several bombs dropped in the shipyard across from our camp last night. Seems to be getting nearer to us every time now. I am engineer on a speedboat now. It will be several days before we get it running.

Dec. 22 — Cleared up about noon today. We had a motorboat out for a speed run this afternoon. Worked fair. Fritz came over just as we finished supper. Dropped a bomb about 20 rods from us on a water main, and stopped all our water. Also our lights at the same time. Three Englishmen were killed just across the docks from us.

Dec. 23 — Clear and cold. Worked on the water

LT GATES, commander of the Dunkirk squadron, distinguished himself in both World Wars I and II.

main so we could have water to cook with. Had the rest of the day to ourselves.

Dec. 24 — Cloudy and rainy. Still on motorboat. No raid, but the siren blew at 10:00. This doesn't seem like Xmas Eve to me. Most of the boys are singing and making all the noise they can.

Dec. 25 — Well, this seems to be just any other day. Only it is snowing by spells. Had a fairly good dinner. No work.

Dec. 26 — Ground white with snow. Snowed all day. Fritz is getting to be a real stranger here.

Dec. 27 — The sun has shone most of the day. A little cold tho. Sounds like a big battle at the front.

Dec. 28 — Cold and cloudy and snowing at times. Still firing at the front.

Dec. 31 — Windy and cloudy. Expected to fly today but it was too windy.

Jan. 1, 1918 — Old Glory went up this morning over our camp for the first time, and it looks for sure as if we mean business. It is on a 75-foot pole and can be seen all over the city. Expect to fly tomorrow if the weather will permit.

Jan. 2 — Cloudy and rainy. No flying. We intended to try out one plane, but water pump broke.

Jan. 3 — A German came over at noon today. He sure was up some. Could only make out a tiny silver speck. Was reported to be up 20,000 feet. There was a heavy AA fire put up. He was reported shot down at the lines. He was in sight for at least 15 minutes.

Jan. 4 — Ran motor all day charging batteries, otherwise nothing doing.

Jan. 7 — Fritz paid us another visit last night, or rather this morning at 3:15. Don't think he dropped any pills tho. A bad wind and snow today.

Jan. 13 — Went out to the Handley-Page base. They are large night bombing planes. A young Canadian pilot showed us the planes. He has been at the game two years. They bomb anywhere from 4000 to 9000 feet. Mostly about four or five thousand feet.

Jan. 14 — Our first plane went up today. It was a scout. One of the big bombing boats started up but didn't get off the water. Had engine trouble.

Jan. 19 — LT Gates went up in a DD [flying boat] this afternoon. Cloudy, but that didn't stop Fritz from coming over. Dropped a few pills near the French seaplane base.

Lieutenant Artemus Gates was commander of the Dunkirk squadron from the spring of 1918 until forced down behind German lines in the fall of that year.

He was Hildreth's favorite commanding officer. According to Hildreth, LT Gates never asked his men to do anything that he wouldn't do himself. For this reason, he never failed to get about twice as many men as he needed whenever volunteers were needed for a sticky mission. He almost always led such operations himself.

In October, LT Gates was forced down behind German lines. He made a poor prisoner and escaped only to be recaptured just short of the front lines. After the Armistice was signed, he made a special trip down to his old unit and spent an entire day getting letters and messages from his men to be taken back to their families. He also wrote a letter to the family of every man who had been under his command.

During World War II, he became Under Secretary of the Navy for Air.

Jan. 20—Raining again today. Fritz hit the French base again last night and set it on fire. Some of our boys went over to help put it out. He also came pretty near to us, dropping three about 100 feet outside of our camp. Every barracks had holes in it from flying pieces of the bomb, and nearly every bunk in ours was torn up, but we were all in the dugout at the time.

Jan. 22 — Fritz came over last night and dropped a bomb in our mess hall. It sure is a wreck too. Two more fell just outside of camp.

Jan. 23 — Our planes are flying every day, now that the weather will permit.

Jan. 25 — Today looks and feels like summer. Guess Fritz thought so too. Got the alarm at 6:40 P.M., and this time it was a real raid too. Dropped three about 10 rods from our hangars. Kept us up until 10:00 P.M. Then at 1:00 A.M. he opened up on us with his 15-inch, long-range gun from 22 miles away, and in a few minutes he started to shell us from the sea, but this didn't last long. Got six shells from the big boy and only a few shells from sea. Isn't so bad for one night — air, and land and sea raids.

Jan. 27 — Received my first mail from the States today. The first I have had in over three months. Sure am happy to hear from folks and friends.

Jan. 29 — Another one of those things tonight. Just a few bombs, no damage to speak of tho.

Jan. 30 — Big raid on Paris last night. Dropped about 80 pills. Killed about 50 persons, wounded about 90 more.

Feb. 2 — A bright, sunny day. Very warm for February. A French HD (flying boat) fell today about 15 rods from our camp. I was sitting in our speedboat, and we were all ready to shove off as one of our planes was in the water ready to go out. It hit the water upside down and sank before we could get to it. The pilot was killed. He was still in the plane when it sank. We dragged for it, got hold of it in about 20 minutes. A big minelayer pulled it up. The pilot was still in his seat. He had been killed in the fall.

Because all the squadron's planes were of an amphibious type, naval speedboats were used when the planes crashed in the harbor. Heavy motor launches, with a maximum speed of 35 mph, the crash boats were also used extensively to pick up survivors of crashes in the English Channel. Hildreth served in one of these speedboats.

Feb. 15 — Today has been a real day again. Seems like everything that can fly was up. A French DD fell at about 3:30 P.M. We were a quarter of a mile or so from it. No one hurt bad. We were the first one to it, but a French motorboat was right near and they got the men off. They were lying on the wings and were hardly wet.

Feb. 16 — Clear, crisp. A great day for flying. Had two HD's up.

Feb. 17 — Goldman and I were out to sea today after a French HD that came down. Also, four of our planes started for Calais on a test flight. One came in with engine trouble at once. The others made the trip O.K. Air raid tonight — not bad.

Feb. 19 — Four of our planes started for Dover, England — 35 miles. One had motor trouble and didn't go.

Feb. 20 — Bad weather, and machines couldn't get back today. Still at Dover.

Feb. 21 — Cloudy and windy. Planes came in at 3:30 P.M. They had lost one HD at sea. Had to land and his pontoons filled with water and it sank. Gates came in with four men in his DD. He had landed and picked up the HD's pilot.

Feb. 26 — Well, everything seemed to go wrong today. Ensign Read was killed, also one of his observers. Read was lying on a piece of the tail when we got there. He died shortly after we got him to camp. The observer couldn't be found. He fell about 500 feet in a nose dive. Read just came here for duty on the 24th. His first flight here. Also had three planes hit sea wall and bust up.

Feb. 27 — Clear and warm. A report came in that the observer's body had been sighted, floating just off the Malo Beach about three miles from here. We went out but could not see a thing.

Feb. 28 — Went out to Read's funeral this morning. A French plane crashed but no one was hurt. He was landing and the wind got under his tail and he went over on his nose.

Mar. 4 — Yesterday British planes bombed Ostend and did damage. Haven't learned how much. Weather still cold and damp.

Mar. 6 — Clear and fair. Started flying at 9:30 and flew all day — both scouts and boats. Smoky Joe Huttelson took a DD up and got up about 1000 feet when the rudder wires came loose, and the only way he could come down and land was cut his motor until it started to nose over, then speed up and level off again until he landed. But he landed too near the beach and the plane was wrecked on the rocks.

BACK FROM THE FRONT — Many planes were brought back for repair after combat or accidents.

Mar. 9 — We had a fellow accidentally shot today. He was combing his hair and the bullet came through the wall of our barracks. Our hut is next to the armory where one of the observers was cleaning his machine gun when it accidentally went off.

Mar. 15 to 21—Camp quarantined for the mumps. Weather fair. Just our usual camp life. A little flying.

Mar. 21 — Last night was a real one — air raid. At 9:15 P.M. and at 4:30 this morning we had everything from air raid to big shells, sea raid and all. Fritz lost five of his raiding ships and the fight lasted into the forenoon. The English lost one destroyer, which was torpedoed by mistake. Fritz also lost four Gothas, night bombing planes. They were met by some of our fighting scouts just at daylight as they were going home. We got reports that the long-expected German drive started this morning at daybreak.

Mar. 22 — Rather quiet here, but things are going some at the front. Tonight at 5:15 P.M. the big gun opened up on us, and getting rather close too. Saw a German scouting plane shot down tonight by French scouts from seven or eight thousand feet, but at that the pilot didn't lose control of the machine and was not badly hurt, altho the plane was a total wreck. It is certainly wonderful to see the falls that men get out of alive.

Mar. 23 — Well, Fritz is still at us with the big gun (Big Bertha). Otherwise things are quiet.

Mar. 24 — 5:00 P.M. and Jerry is still trying to move us out of our happy home with his 15-inch toy. The shells come about an hour apart. They do very little damage for their size. Are supposed to weigh a ton.

Mar. 25 — Fritz is still throwing big shells at us. Ten or 12 have hit near us. One hit last night at 9:15 P.M., within 100 feet of our barracks, and rock and brick came through the wall while we were all sleeping, but no one was hurt. A French soldier was hit with a rock and had his leg broken. He was about 200 yards from where it hit. Haven't had an air raid for several nights.

Mar. 26 — Weather bad, windy, although the shells are still coming. Three hit since supper. No flying.

Mar. 27 — Well, we are still under fire. We have reports of hard fighting on a 50-mile front at and near Cambria. Although we are getting all kinds of rumors, don't know how many of them are true.

HANDLEY-PAGE, manufactured by the British, was one of the largest combat planes in World War I.

Mar. 28 — Jerry stopped firing at daylight today as usual, but suppose he will start again this afternoon as he always does. I am leaving here for a while. Don't know how long. Eight are going to an auto repair base (English).

Mar. 29 — We are close to the Handley Page night bombing base. We are repairing and testing trucks. This is one of the largest English transport bases in France.

Apr. 1 — This is Sunday and we are not working. I am back in camp for a visit. Am going to stop in town on my way back and get supper. Have found a place where one can get a real good feed.

Apr. 2 — Well, just as I got back to our new place with the English last night about 6:30 they wanted someone to drive a car down near the line after a bunch of A.F.C. pilots. An English boy went with me. Sure had some trip. Couldn't find the place, and were gone until 8:30 this morning. Drove almost all night. Stayed at a place called Aire. Got back to camp about night today. We were within sight of the line and guess, in fact, that we were about a mile from the front trenches for a long time last night. Drove for several miles just behind the lines. Could see the flame of the guns.

Apr. 2 to 11 — Still at the same place, but expect to go back to our old camp soon. Have had no raids to speak of and only a shell now and then. Weather has been unusually good.

Apr. 11 — Came back to the old place today. Am back at my old job on speedboat. An English sub-chaser caught fire and burned up right in front of our camp. No men hurt that I could see.

Apr. 12 — One of our HD scouts fell in a nose-dive. Pilot was killed, or died a few minutes after a car from the camp got to where he fell. It was on land. The plane was a total wreck, not a whole thing on it.

Apr. 12 to 22 — Weather fair, altho it could be better. We get very little news from the fighting. We know the Germans are still driving. But we should worry. They are going to hit something solid soon, and before fall they will be the ones who are retreating.

May 4 — One of our patrols started to go out at 6:00 A.M., but out of the five planes only one got off the water safe. One DD flying boat started to get off, and just off the water the wind caught it and turned it completely over. It fell about 15 feet, but none of the three men in it was hurt at all (Pilot Carson). Also an HD fell about 15 minutes later as it was getting off. It was up about 300 feet over town, but made a canal in the town. The pilot (O'Connor) was not hurt, altho the machine was wrecked beyond repair.

May 5 — Nothing doing. Patrol this afternoon. Got paid.

May 6 — A patrol of two DDs started out at 9:30 A.M., and at about 11:00 a pigeon came in from the west with the news that one of the planes was down. We started out with the speedboat and LT Gates with a DD. He found them at 12:30 P.M. We got there at 1:30. When we arrived we found two men of the plane that fell in the other DD and Gates standing by. Red Smith, the pilot, was badly hurt. The gunner was not hurt much. When we got back to camp they had sent out a scout plane to look for us and he had not returned. We got more gas, had lunch and went out to look for him. Saw no sign of him. Got back at 10:00 P.M. There, we got the report that he was 150 miles south at Le Havre, France. O.K. Got lost.

May 7 to 18 — Nothing of importance. Air raid on 5th from 10:30 to 12:00 P.M. Several morning patrols are getting out at about 3:00 A.M. Sure is early and it is always cold too.

May 18 — Patrol at 5:30 A.M. and also a fighting patrol of seven HDs at 9:30 A.M. One, after being up about five minutes, started to land. Something must have gone wrong. As he hit a house in town the machine caught on fire. The pilot was alive when we got to the place, but died before we could get him to the hospital. Just as we were going to supper a French HD hit the mast of a ship. We as usual were the first ones to it. The plane was lost but the pilot was not hurt at all.

May 19 — One of our HDs, which went out on patrol this morning, is lost somewhere. O'Connor pilot. Weather fair. Returned.

May 20 — G. M. Marshburn was killed this A.M. in a fall with a scout plane as he was starting on patrol. He fell in about 20 feet of water. We have been dragging for him but haven't found pilot or plane yet.

May 31 — Clear but very windy. A patrol started out this afternoon. Elliot hit a boat as he was leaving the water. He wasn't hurt at all, altho the machine was a total wreck.

Jun. 1 to 6 — Lost two planes in one day — an HD and a DD. One was wrecked while landing and the other while being towed in. No one was hurt, just a good wetting is all.

Jun. 5 to 15 — Well, Fritz has been rather busy around here of late, altho he has not bothered us at all. He came very near putting the British night bombing base out of the game a few nights ago. But they have been going over the lines every night since. A bunch of our boys are helping them build the base up. We expect to move from this base but don't know when or where.

Jul. 4 — We had sort of a field meet. Ball game, foot races and other sports, and some dinner too. We had a very nice time at night — a show of camp talent and of course an air raid.

Jul. 7 — The day of days. A patrol went out in the morning about 8:30. At about 10:30 we got the word that one of the DDs was down about 25 miles out. At the time we were picking up an HD that had wrecked. As soon as we got in we started out. In the meantime a French boat had gone after the plane. When we were out about 18 miles one of our scouts signaled to us that the French boat had picked up the plane, so we started in. Our compass went wrong and we missed our base, and when we hit the coast we thought we were west of Dunkirk. Instead, we were east, and thinking that we were west. We started east, and the first we knew that we were wrong was when a shore battery started to shell us. We had gone about a mile by the German lines at Nieuport. The boat was hit about 10 minutes after the first shot and it started to sink. We left the boat then. That was at 4:30 P.M. At that time we were about three miles offshore. We started to swim in to shore inside of the German lines. Two observers — Coash and Bailey — and I made up our minds we would try to get inside the Allied lines before we tried to get ashore. We saw two of the boys taken prisoner by the Germans. I was picked up by a French seaplane between 6:30 and 7:00 P.M. The two boys who started out with me got ashore a few minutes later, behind Allied lines. Two of the boys never got ashore — that is, as far as we can learn. We were being shelled all the time in the water. Also, the plane that picked me up was shelled all the time it was on the water. We had a real old-time raid that night after I got back to camp, and the bed that I had been sleeping in was wrecked about two minutes after I got up and went to the dugout. A bomb hit about 20 feet from it.

Jul. 8 to 20 — Have been resting up ever since my little run-in with Fritz. We had a very heavy raid on the 19th. I am expecting to take leave in a few days.

Jul. 21 — Started on my leave today. Went to Calais to get leave boat. Had to stay there all night, and it sure looks as if Fritz has it in for me. There was a raid, and a bomb hit within 20 feet of the hotel where I was sleeping. There wasn't a window left in the place. Several pieces of the bomb came through the window of the room I was in.

Jul. 31 — Today was a big day, or rather we had a big man with us [Franklin Delano Roosevelt, the Assistant Secretary of the Navy], but only for a very few minutes. Just before he got here a German picture machine came over. There was a very heavy barrage put up, and he had to come down and land about a mile from here in the sea. Fritz also started firing in here with his big gun.

Aug. 1 to 10 — Just the same old story. Very few patrols of late. The Allied drive still going fine. Weather very bad for flying.

Aug. 11 — Sunday. One of our patrols started out at 4:30 A.M., but only one boat got off. The other had motor trouble. DD 817 was the one that got away, with Ensign DeCerema as pilot. In about an hour they came in and reported that they had sunk a sub. We learned there wasn't any doubt about it.

Aug. 12—Monday. Oil still coming up at the same place. Light air raid last night.

Aug. 13 — Another sub. One DD (Flying Boat) went out alone again this morning at 5:00 A.M. Sighted a sub out a few miles lying on the water. The DD must have gotten real close before the sub sighted it. They didn't have time to dive and opened up on the DD with 5-inch guns. The two gunners in the plane cleared the sub's decks in short order with machine guns (DD 825 — Pilot Carson, Gunners Chord and Siler), killing two men. Just as the sub dived the plane dropped two bombs real close to it.

DISTINGUISHED VISITOR—Assistant Secretary of the Navy, F. D. Roosevelt, addresses men at Dunkirk.

Aug. 14—Weather fine and warm. Mr. DeCerema fell this afternoon in a DD (No. 812). He was just testing out the plane. He had two men with him. A fellow by the name of Lauren was in the forward cockpit and was killed. DeCerema was hurt badly, but not fatally. The other fellow was not hurt at all.

Aug. 22 — Land bombardment last night — eight shots from big gun. Commander Gates went out this morning and got two men who fell, or rather had their plane shot down just off Ostende. They were in a Handley Page night bomber. They fell at 1:30 A.M. and were picked up off the floating parts at 9:00 A.M.

Aug. 23 — Sea bombardment at 1:10 A.M. Also air raid at same time.

Aug. 27 — Went to Calais after new speedboat. Mr. Read, Wardwell, Carson and myself. Boat was still on the docks, and we didn't get there until 3:30 P.M. — too late to start back — so we came back to camp in the car. It's not a new boat, but it is in A-1 shape.

Sep. 1 to Oct. 15 — Nothing of interest. Went into Ostende, Belgium, one day in speedboat. Went through minefield at mouth of harbor. Our flying boat sank at the dock. Repaired plane that had pontoon wrecked. Had to stay two days. Got back on French minesweeper. Had very little to eat while there.

Came to Zeebrugge Mole on November 4 to prepare to make air raids on German cities with big air, sea and land planes. Had quarters in ship and railroad station on mole.

We were stationed at Zeebrugge on Nov. 11, 1918, having been sent there intending to start raids on some of the large German cities — Berlin included.

Left the front Jan. 2, 1919. Sailed for the States Jan. 8, 1919. Landed in States Jan. 24, 1919.

TAFFRAIL TALK

NAVY CHAPLAIN LCDR Marvin H. Howard is a man who deals in matters of faith, but many of his friends and shipmates at Pensacola's Ellyson Field were convinced he was misplacing some of his when he announced his intention to drive a 30-year-old auto to San Diego.

There were few indeed who believed he'd even make it out of Florida — much less the 2000-plus miles to the west coast. Chaplain Howard, though, had faith in his 1932 vintage car, named Jezebel. He bought her in New York City in 1955 for a mere 35 dollars, and she has served him well ever since. He flatly stated that he expected to make the trip in six days.

He and Jezebel did even better than that, as it turned out. When they chugged into North Island — 2152 miles from Pensacola — just five days had elapsed since their departure.

During the cross-country trek Jezebel had used but three quarts of oil, and averaged just about 22 miles to the gallon of gasoline. And what's more, she had gotten Chaplain Howard to San Diego in plenty of time to report for further transportation to his new duty station — the Seventh Fleet antisubmarine warfare carrier USS *Bennington* (CVS 20).

★ ★ ★

When a spry old gentleman and a bevy of curious youngsters descended upon the drydocked aircraft carrier USS *Essex* (CVS 9) at the New York Naval Shipyard not long ago, even the normally blasé shipyard workers stopped to gawk.

The nimble visitor wasn't just any rubber-necking tourist. He turned out to be the famed poet Robert Frost, out with a clutch of his grandchildren and great-grandchildren for "something really different" in the way of a tour.

Poet Frost said he was there to see the ship, and he wasn't kidding. Eighty-eight years old, the famed bard proved as agile and enthusaistic as any of his youthful kin — tramping over, through and around *Essex* from bow to stern. In the process they managed to leave several escorting officers, plus a group of civilian cameramen (who were shooting some footage to be included in an upcoming documentary on Mr. Frost's life) panting in their wake.

★ ★ ★

Storekeeper First Class William J. Kirby, USN, of NTC Bainbridge, Md., we've learned, likes greyhounds.

Now if a sailor says he likes greyhounds, it usually isn't news. Your first assumption would naturally be that he's a dyed-in-the-wool destroyerman, and that he's merely referring to his favorite ships by their long-time nickname. In Kirby's case he really means greyhounds — the four-legged variety.

Kirby, it seems, was introduced to greyhound racing some years back while stationed in London, and soon decided to become a racing dog owner himself. His dogs have won some, lost some, in English competition since that time, but the big prize, winning the annual Greyhound Derby (English dogdom's equivalent of the Kentucky Derby) has thus far eluded him.

When SK1 Kirby completes his twenty he plans to head back for the British Isles. His current standard-bearer, the strangely named Irish Horse, is rated a hot favorite for the upcoming 1962 Derby.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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The Bureau should be kept informed of changes in the number of copies required.

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• AT RIGHT: FISH STORY—Qualified submariner, G.E. Brewer, RM1(SS), receives his dolphins from LCDR C. Winkler, Jr., skipper of *USS Redfish* (SS 395) as other new dolphin receivers look on. Ceremonies took place on board the Seventh Fleet sub at Yokosuka.

U. S. NAVYMAN

I will never forget that I am an American fighting man, responsible for my actions, and dedicated to the principles which made my country free. I will trust in my God and in the United States of America.

man of RESPONSIBILITY

D208.3:546

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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JUL 23 1962
SOCIAL SCIENCES

This magazine is intended for 10 readers. All should see it as soon as possible. PASS THIS COPY ALONG

JULY 1962

7.05

OUR NATIONAL ENSIGN, flown on the front cover of this month's issue, has behind it a long and honorable tradition. On 3 Dec 1775, John Paul Jones hoisted the Continental flag on board *Alfred*, Esek Hopkins' flagship, the first Continental vessel to fly the colors of the new nation.

Jones was also on hand the first time a foreign country saluted the Stars and Stripes. (An earlier version of the American flag was saluted by the Danish fortress at St. Croix, Danish West Indies, on 25 Oct 1776.) He was commanding officer of his own ship, *Ranger*, which fired a gun salute to France upon entering Quiberon Bay on 14 Feb 1778. The French returned the salute, thus officially acknowledging the existence of the new country.

The 13 stripes in the original "stars and stripes" were the same as they are today; however, during the period from 1794 to 1818, there were 15 stripes. Then it was determined that adding new stripes to honor new states would become too unwieldy, so the 13-stripe design was made permanent.

Today, the stars and stripes flown on Navy ships may be found in almost every portion of the world.

All branches of the military service have precise regulations regarding the display of the ensign — when, where, and how it may be hoisted or lowered. Laws have been written to govern the use of the flag and to insure a proper respect for it. Custom has decreed certain other observances in regard to its use.

When U.S. naval vessels are at anchor in port, the flag is flown from the flagstaff daily from 0800 to sunset. It is displayed from the gaff on the aftermost mast during daylight hours when a ship is getting underway; or coming to anchor; when falling in with other ships; cruising near land; during battle; or when otherwise directed by the senior naval officer present.

No ship of the U.S. Navy ever dips the national ensign to another vessel unless in return for such compliment.

As the flag itself is a symbol, a considerable amount of symbolism has gone into its design. Here is one version:

The stars appear in the upper left-hand side (or the "west" side) of the flag because they represented, at the time of the original design, a new "constellation" of states rising in the West.

The blue in the field was taken from a Scottish banner that signified the virtues of vigilance, perseverance and justice. The red, which in Roman days was the signal of defiance, denotes daring; the white, purity. The 13 stripes represent the original united colonies of 1777. (There are other interpretations of the symbols that differ from these.)

While the stars on the flag do represent the number of states in the Union, there is no law specifying that any particular star should represent a certain state. However, it is a popular opinion that, beginning in the upper left-hand corner of the field and numbering across, each star stands for a state in the order of its entrance into the Union.

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

JULY 1962 Nav-Pers-O NUMBER 546

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel
REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel
CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, **Editor**
John A. Oudine, **Managing Editor**
Associate Editors
G. Vern Blasdell, **News**
Jerry Wolff, **Research**
Don Addor, **Layout & Art**
French Crawford Smith, **Reserve**

- **PHOTO AT LEFT: Task Group *Bravo* steams in formation through calm Atlantic waters. This Task Group concentrates on accelerating and developing antisubmarine hunter-killer (HUK) tactics, doctrine and equipment.**

- **CREDIT: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated. Photos on pages 6, 7 and 8 courtesy Stars and Stripes.**

SWIMMING PIG—Minemen lower pig into water during sweeping operation. *Below:* Crewmen of *USS Cape* (MSI 2) man fantail winch.

A MAGNETIC 'tail' is streamed.

MinPac

SOME OF THEIR WEAPONS resemble a collection of garden hoses. The ships are short, squat and wooden. But without these ships, the sleek destroyers, cruisers and carriers wouldn't go far.

The ships are minesweepers, and they are operated by the Pacific Mine Force, some 3500 men strong. The minesweeping gear, streamed from the stern of the ship, can be the rubber-coated magnetic tail that looks like an accumulation of garden hose or, perhaps, giant extension cords, which carry a mighty electrical wallop. Their tools can also include several other forms of minesweeping gear. But all have one purpose: To destroy or otherwise eliminate that most complicated weapon, the sea mine.

Safe passage of ships across the oceans of the world is of no value if entrance to ports and harbors is blocked by mines. This last part of the journey can be made safe only by forces capable of clearing away the mine warfare mechanisms which are in existence today.

Minesweeping is dangerous duty because mines themselves are clever and sophisticated weapons. They can be moored to the ocean floor and set to explode when hit by a ship. These

TEAM WORK—Minesweeping boats of Mine Division 112 prepare for a close-to-shore sweeping exercise.

Goes Deep Sea Hunting

are the contact mines. Others can be planted on the ocean floor to be exploded by one or more of the various influence signals all ships give forth. These are the influence mines. Added to this are tricks of delaying the rising of moored mines and delaying the arming of the bottom mines. Thus, an area swept today and believed to be clear, may be full of live mines tomorrow.

This situation makes understandable the minesweeper sailor's claim – "Where the Fleet goes, the minesweepers have been."

TODAY'S MODERN MINESWEEPER carries two general types of sweeping equipment:

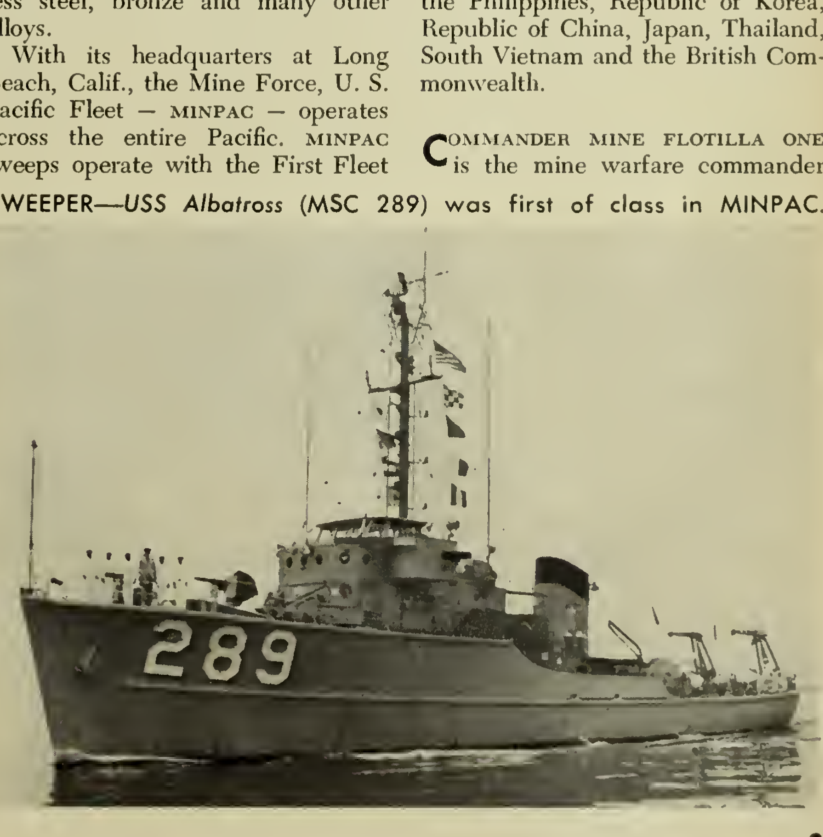
- Mechanical gear which severs moored mines from their anchors, permitting the freed mine to pop to the surface where it can be destroyed.
- Influence gear which generates magnetic and acoustic signals similar to those produced by larger ships and so magnified that they explode the influence mines at a safe distance from the minesweeper.

Minesweepers are wooden because steel-hulled ships have an extraordinary affinity for magnetic mines. When they get together, they make a loud noise. A great percentage of what metal there is in a modern minesweeper is non-magnetic. The builders have used aluminum, stainless steel, bronze and many other alloys.

With its headquarters at Long Beach, Calif., the Mine Force, U. S. Pacific Fleet – MINPAC – operates across the entire Pacific. MINPAC sweeps operate with the First Fleet off the west coast of the United States and with the Seventh Fleet in the Far East. Regularly, minesweepers exercise with the navies of the Philippines, Republic of Korea, Republic of China, Japan, Thailand, South Vietnam and the British Commonwealth.

COMMANDER MINE FLOTILLA ONE is the mine warfare commander

SWEEPER—*USS Albatross* (MSC 289) was first of class in MINPAC.



UP THE RIVER — *USS Energy* (MSO 436) and *USS Pivot* (MSO 463) pass through locks in Columbia River while on record-breaking cruise.

in the western Pacific under Commander Seventh Fleet. Operating with him and homeported in Sasebo, Japan, are eight coastal minesweepers (MSCs), a division of 10 36-foot minesweeping launches (MSLs) and the mine countermeasures ship USS *Epping Forest* (LSD 4). At least one division – five ships – of ocean minesweepers (MSOs) is always deployed from Long Beach for duty with the Seventh Fleet in the Far East.

In Long Beach, in addition to the six divisions of ocean minesweepers divided between Mine Squadrons Seven and Nine, there is Mine Squadron 11, made up of two divisions of 57-foot minesweeping boats and 10 more of the 36-foot minesweeping launches. MINRON 11 also includes the Navy's only two inshore minesweepers, USS *Cape* (MSI 2) and *Cove* (MSI 1). These are prototypes of a fleet that could be built in small boat yards almost anywhere in the country should the need arise.

THE NEWEST MINESWEEPERS in the U. S. Navy are USS *Albatross* (MSC 289) and *Gannet* (MSC 290), examples of a new class of coastal sweep which joined the Pacific Mine Force in 1961. They are scheduled to sail to the Far East later this year to be homeported in Japan in COMINFLOT One.

While their main job is sweeping mines, Pacific minesweepers have performed other naval duties.

Their minehunting equipment also enables them to search for and find sunken aircraft. From Japan's Inland Sea, in Subic Bay and all along the west coast of the United States, minesweepers and MINPAC's Explosive Ordnance Disposal divers have located and helped raise a variety of lost aircraft. Often such salvage is the only way the cause of a crash can be discovered and corrected.

ALL MINE — Mineman at the Pacific Mine Force Drill Mine Preparation Facility, Long Beach, readies practice mines for Fleet training exercises.

In the field of antisubmarine warfare, minesweepers are also making their contributions. They work with Pacific Fleet submarines acting the part of targets, and they give the subs a good run for their money.

THE SHIPS ROTATING TO DUTY in the Far East never sail without a full load of clothing and other donations for the needy of Asia. When visiting foreign ports, the minesweepers, no matter what their size, give children's parties, adopt orphans, repair schools, compete in athletics, give talks on the American way of life, and, of course, provide visits to minesweepers.

Pacific minesweepers regularly participate in West Coast public celebrations, such as the Portland Rose Festival, city anniversaries and national holiday ceremonies, and frequently they simply pay courtesy visits to the smaller cities that very likely have never had Navy ships in their harbors before.

Throughout the Los Angeles-Long Beach portion of southern California, the minesweepers of the Pacific Mine Force have also been ready and able to help their civilian neighbors.

When a sudden and freak tidal surge threatened thousands of pleasure craft moored in the Los Angeles harbor area, minesweeping boats and men of MINPAC provided assistance to city and port authorities. They provided similar help when fire struck the harbor area.

It is a frequent occurrence to have a minesweeper, on routine training off Long Beach, take in tow a swamped or stranded small boat, often providing medical assistance in addition to the free ride back to port.

MINPAC men also play hard. The Pacific Mine Force claims it has the most active intramural and physical fitness program, per capita, of major naval commands. Over a third of the officers and men use the gymnasium and its accompanying facilities. Every ship and unit participates in one or more of the command's competitive sports leagues, which include basketball, flag football, golf, bowling and volleyball.

The ships of the Mine Force are "little fellas" in this man's Navy. But there's nothing small about the job they do. And, as in days of yore, they are sailed by iron men with more than their quota of spirit.

NEW MISSION — *USS Epping Forest* (LSD 4) is now mothering coastal minesweepers for the Seventh Fleet.

Minephibian

WHEN THE MEN aboard USS *Epping Forest* (LSD 4) got the word, the word was "Minephibian." That was what they were serving in.

Epping Forest, a veteran of 19 years in the Navy, was designed originally to combine the functions of a troop transport, floating dry dock and repair ship for assault landing craft.

Although she was a pretty versatile ship to begin with, the Navy needed even more varied capabilities in a ship to mother the coastal minesweepers operating with the Seventh Fleet.

Epping Forest now makes it possible for minesweepers to steam to almost any point in the Far East to do their work. The reason, of course, is that *Epping Forest* is nearby to furnish additional fuel, supplies or spare parts.

A mezzanine deck full of mine warfare equipment was added to the well deck, and new, improved replenishment-at-sea rigs were installed to speed the refueling of her dependent minesweepers.

Cradles for carrying 36-foot, 11-ton minesweeping launches were installed alongside her helicopter and well decks.

When the launches are needed, they can be lowered over the side of *Epping Forest* by the ship's crane. Later, they can be stowed away again after their work is finished. — Chuck Brown, JO1, USN.

WATER BOUND — Minesweeping motor launch is lowered over side. *Below:* Rack lets LSD lay mines.

ON DECK — Copter pad is new to 'Minephibian.'

THE MOST—Portrait of *USS Long Beach* shows ultra-modern design. *Below:* Cruisermen check pamphlet printed aboard for German visitors.

DECK GANG mans mooring lines.

Life ir

THE STACKLESS PROFILE, the box-like superstructure, the steeply raked bow and the contrasting square stern are beginning, at least in some quarters, to look somewhat familiar. However, it will be quite a while before people can look at uss *Long Beach* (CGN 9) without the feeling their immediate forebears had when they beheld their first horseless carriages and wondered, "What won't they think of next?"

Long Beach is, of course, armed with missiles – *Talos* and *Terrier* – whose robot-like, quick-moving and deadly perfection give the viewer a

SMALL arms are studied on CGN.

LINE WORK—The old 'heave ho' is still needed for mooring. *Rt:* Side cleaners spruce up ship's skin.

an Atomic Cruiser

chilly feeling back along the spine.

Just aft of the ship's towering superstructure is a black box containing *Asroc,* which electronically clicks an enemy submarine into its sights, then destroys it.

Long Beach is the first ship of a planned high-speed nuclear task force. Other nuclear task force ships are USS *Enterprise* (CVAN 65) and the guided missile frigate *Bainbridge* (DLGN 25) which will join the Fleet later this year.

Long Beach's two nuclear reactors force her through the water at a speed in excess of 25 knots.

Long Beach's crew lives well. Each man has a separate bunk with built-in lockers and a foam-rubber mattress. Other popular features are individual reading lights and air conditioning.

Like most sizable Navy Ships, *Long Beach* has all the facilities of a city – from cobbler shop to a hospital.

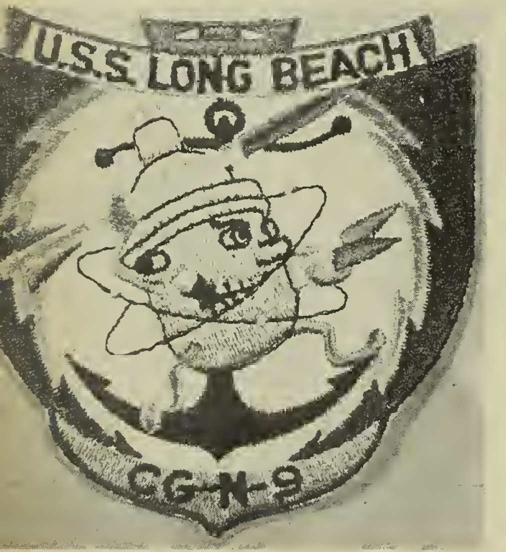
LT Jule T. Connolly, the Assistant Medical Officer of *Long Beach,* can testify concerning the ship's stability. He had to perform a five-hour operation on a French seaman picked up in mid-Atlantic in answer to a nearby freighter's distress call.

According to LT Connolly, *Long Beach's* roll is slow and doesn't contribute to seasickness. This evaluation was borne out during the ship's maiden voyage to Europe through exceptionally heavy seas. There was only one case of seasickness.

After *Long Beach* arrived at Bremerhaven, Germany, at the end of the first part of her maiden voyage, she held open house which brought "ooohs" and "aaaahs" from thousands of visitors.

Long Beach is able to work alone as a one-ship task force, or she can

THE LATEST—Marine non-com passes the word on M-14 rifle. *Rt:* Germans take in the wonders of *Long Beach.*



work with other ships. Her versatility and other attributes speak well for her and hint that the new shape of *Long Beach* is the shape of things to come.

Whenever and wherever Navymen get together for a bull session there's a chance that, sooner or later, the conversation will center on ships and their capabilities.

One of the hottest subjects afloat is this powerful nuclear cruiser, still a stranger to the rest of the Fleet.

Long Beach, while operating with the Atlantic Fleet out of her home port in Norfolk, Va., caused quite a lot of talk when her maiden voyage took her to Europe. ALL HANDS presents here a few more photos of this hot topic, to help fill you in for the next time the salty talks turn her way.

Top: Terrier surface-to-air guided missile streaks skyward from cruiser's forward launcher as the CGN tests her striking power in Atlantic waters. *Top left:* USS *Long Beach* (CGN 9), first ship in the Navy's planned high-speed nuclear task force, moors at Bremerhaven, Germany, during goodwill visit. *Left:* This is the shoulder patch worn by the world's first nuclear cruisermen. *Bottom Left:* Assistant medical officer on board *Long Beach* checks patient in the ship's modern and well-equipped sick bay. *Bottom:* Part of a batch of 130 pies, the average amount served for one meal, are sliced in the cruiser's bake shop.

CHECKS are made before launching at Naval Missile Facility, Point Arguello, Calif. *Rt:* Missile takes to air.

Countdown at Point Arguello

The countdown has begun. Launch time is set for 0600. For the next few hours a team of highly trained naval officers and civilian technicians in the Range Operations Department at the U. S. Naval Missile Facility, Point Arguello, Calif., will make hundreds of last-minute checks to make sure the Pacific Missile Range is ready to support the firing.

The operations room is dimly lit, and the officers and technicians are surrounded by a maze of checkout consoles, plotting boards and radarscopes. Telephones are ringing, lights are flashing, and the clatter of tireless teletype machines can be heard feeding countdown information to instrumented ships at sea and tracking stations on mid-Pacific islands.

More than 65 square miles of land, sea and air must be cleared of aircraft and ships for a safe launching, meteorology reports must be studied, railroad trains which run through the base must be clear of the hazard area, and millions of dollars worth of electronic tracking instruments must be working perfectly.

The Range Facilities Control Officer (RFCO) collects all this information and relays it to the agency conducting the launch. He has direct voice communication with aircraft, ships at sea, Point Mugu, San Nicolas Island, Kaneohe (Hawaii) and stations at Point Arguello.

As the countdown continues, a voice over the RFCO's phone says, "A ship is entering the hazard area but should be clear in about 20 minutes. Doesn't look as if she will interfere with the launch." If it should remain in the area, an aircraft with a loudspeaker system would be sent to ask the ship to alter her course.

The Ground Safety Officer reports that no trains are scheduled until after lift-off. (During all space launchings, helicopters escort trains through the Naval Missile Facility. The pilot, observing bright fluorescent marker cards adjacent to the railroad tracks at one-mile intervals, radios the train's precise position to the controller.)

The countdown continues. At 0507, Frequency Interference Control (this group monitors all radio frequencies in the area that could interfere with tracking equipment) reports that a jet fighter at sea is using an unauthorized frequency. The pilot of the aircraft has been notified, however, and will shut off his equipment until after the launch.

At 0530 the Meteorology Department reports cloud cover at 1000 feet, wind is north-northwest at two knots, and heavy thunderstorms are to the west. Fog is also rolling in to cut visibility to less than one mile. This will prevent optical instruments from tracking the vehicle, but in this case, photo optics are an extra bonus and will not cancel the operation.

The terminal countdown has begun. The RFCO makes last-minute checks with all tracking sites. No ships or aircraft are in the hazard area. At 0555 he calls the command post and reports: "The range is green and ready for launch."

Launch time is only a few seconds away. The time ticks by on a countdown clock at the RFCO's console . . .5 . . .4 . . .3 . . .2 . . .1 . . .0. "All stations, this is the RFCO, we have fire in the tail and positive lift-off."

For the next few minutes, all radar and telemetry antennas are poised skyward to track the vehicle as it increases speed and arches down the Pacific Missile Range toward a polar orbit.

The personnel of the Range Operations Department have spent many days preparing for this operation. After launch their job lasts a brief eight or nine minutes. By then the spacecraft should be in orbit.

Another hour or so is spent shutting down the tracking equipment, making a report to Washington, securing aircraft and collecting vehicle performance data to turn over to the launch agency.

This ends a typical launch of a satellite, as controlled from the Naval Missile Facility, Point Arguello.

Can You Identify

"It's a small world" is an old saying that today has become a reality.

This is true not only for astronauts, who circle the globe in a matter of minutes, but also for the modern Navyman in his fast-moving and far-sailing ship.

It all adds up to the fact that Navymen are now seeing even more of the world than in the past and, in doing so they are making new friends in foreign navies at a much faster rate. An increasing number of foreign navymen are also making port in the United States, either for visits or to take training courses in U. S. Navy schools.

Pictured here is a representative group of sailors from an assortment of countries that you are likely to come across when pulling either Shorvey or Seavey duty. How many can you identify? Some should be easy, owing to their distinctive uniform markings, but some are not quite so easy.

Clockwise from Upper Left: (1)

These Navymen?

Greek sailors present arms during review. (2) This Navyman is a member of the Swedish Navy. (3) Men of the Japanese Maritime Self-Defense Force give a U. S. Navyman a light in Tokyo. (4) Netherland sailor heads for his ship with load of souvenirs. (5) Friendly group of Navymen on liberty includes (*left to rt.*) French, Australian and British Navymen. (6) Navyman from New Zealand enjoys chow on board a U. S. destroyer. (7) Men of Nationalist Chinese navy get a lesson in shoring a bulkhead. (8) Formation of crew from Portuguese ship stands at attention. (9) American sub men are greeted by Federal German Navy personnel in Bremerhaven. (10) Chilean Navyman receives instructions in U. S. Navy school for construction electricians. (11) These cool sailors man a Norwegian torpedo boat. (12) These neighborly sailors are from Canada. (13) Navymen of Vietnam discuss shipboard equipment while visiting a U. S. ship at Saigon.

SHIPSHAPE—Navy aviation machinist's mates work on aircraft engine at Tinker AFB, Okla. *Below:* Radio gear is checked by Navyman of VR-6.

NAVY

AT INCIRLIK, TURKEY, last fall, a U. S. Air Force transport plane slowly slanted down from the sky and skimmed onto a sun-baked runway, carrying the opening blow to a hypothetical enemy in Exercise *Checkmate II.*

Out of the Military Air Transport Service C-118 *Liftmaster* trooped gear-laden combat soldiers of the Army's 101st Airborne Division – and an all-Navy aircrew!

The soldiers had been startled, as they settled in the aircraft's seats at Fort Campbell, Ky., to find a Navyman issuing instructions on emergency procedures and naval officers in the cockpit. Most of the troops were unaware of the cooperative effort between the Navy and the Air Force which provides a single strategic airlift force for the United States.

Each day other soldiers, or dependents from all branches of the armed forces, climb aboard MATS aircraft bound for trans-ocean destinations and do double-takes to find themselves in the hands of the Navy instead of the Air Force.

More than 4000 Navymen go about their daily tasks in MATS assignments now. Not only do naval officers fly the aircraft, but bluejackets maintain them and act as flight engineers and flight attendants, while others handle administrative work and special functions throughout MATS. Now in its 14th year, the integrated command functions smoothly to carry out its world-wide mission for the Department of Defense.

MATS IS ORGANIZED into two air forces, Eastern Transport Air Force (EASTAF) and Western Transport Air Force (WESTAF), and three services – *Air Weather, Air Rescue* and *Air Photographic and Charting.* Each of the air forces has several wings. Next below wing level are squadrons.

The Navy in MATS is organized into two of the wings – the Naval Air Transport Wing, Atlantic, at McGuire AFB, N. J.; and the Naval Air Transport Wing, Pacific, at NAS Moffett Field, Calif. In addition, it has its administrative unit at MATS

FLIES WITH MATS

headquarters, Scott AFB, Ill., under the senior naval officer in MATS.

This is currently CAPT Lloyd H. McAlpine, USN who as special assistant to LTGEN Joe W. Kelly, MATS commander, advises him on matters relating to the Navy.

Except for personnel administration, Navy problems are the same as Air Force problems in MATS. The Navy crews fly MATS aircraft anywhere in the world and follow MATS regulations. They are not assigned especially to movement of naval personnel or to Navy-oriented jobs, but fulfill the same sort of regular routine training assignments and participate in the same exercises as Air Force crews. Generally, however, Navy and Air Force crews are not combined on a given aircraft.

ON EXERCISE CHECKMATE II, for instance, the first crew to land was Navy, and several other Navy crews participated. They airlifted Army troops to Turkey to join military units from other countries in NATO maneuvers in the Turkish-Thrace area.

WELCOME MATS — Navymen are greeted by family and friends as MATS flies them from overseas.

Since January this year, they have carried 4th Infantry Division Army troops from Ft. Lewis, Wash., to Germany on Exercise *Long Thrust II A;* U. S. troops to the Philippines on Exercise *Great Shelf/TAGPO;* and maintained airlift missions on world-wide routes.

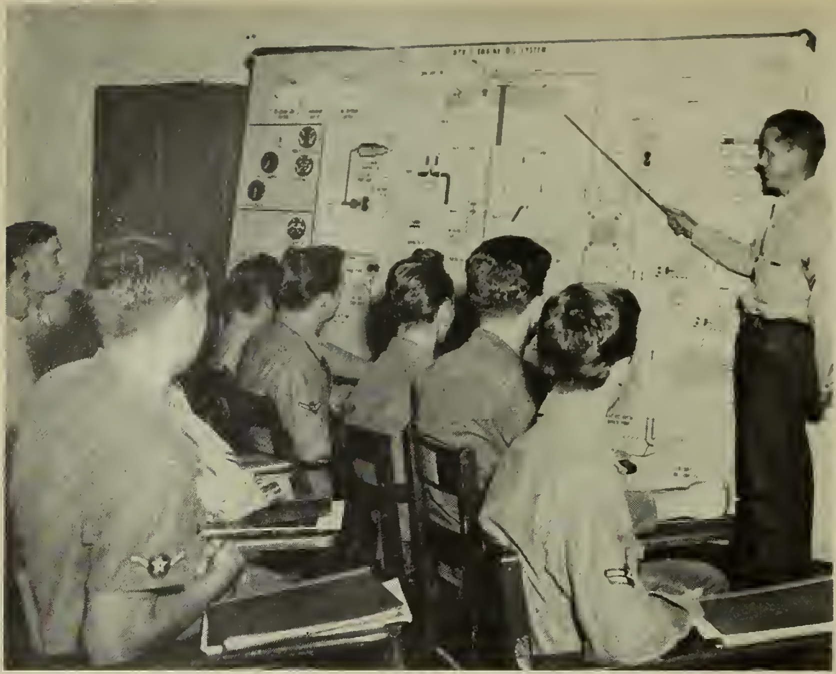
Strategic airlift means moving men and material on a world-wide basis for the Department of Defense, as contrasted to tactical airlift, which means dispersing men and material within a given theater of operations. Strategic airlift is the wartime mission of MATS and its primary reason for existence.

During World War II, this airlift was handled separately by the Army Air Transport Command and the Naval Air Transport Service. In 1947, the ATC came under the newly organized U. S. Air Force, and in 1948 the ATC and NATS combined to form MATS.

ON THE EAST COAST the Naval Air Transport Wing, Atlantic, comprises two transport squadrons — VR-3 (flying), supported by VR-6 (maintenance). Both are based at McGuire AFB. VR-22, at Norfolk Naval Air Station, also attached to the Atlantic Wing, both flies and maintains its own aircraft. Strategic airlift squadrons on the Atlantic coast fly the C-118 *Liftmaster*.

VR-3 flies routes over the Atlantic to Newfoundland, Iceland, Germany, Italy and England. Down

LONG CRUISE—MATS *Super Constellation* on embassy run takes on passengers during stop at Saigon.



NOW HEAR THIS—The workings of a MATS aircraft engine oil system are explained to Navy, Air Force and civilian personnel by Navy PO2.

south, VR-22 flies tropical runs to Guantanamo Bay, Puerto Rico, and North Africa.

Supporting Operation *Deep Freeze 62*, VR-22 flew special airlift missions to Christchurch, New Zealand. "Anytime – anywhere" is the motto of VR-22. MATS planes fly support missions annually to the Antarctic ice box and paradrop supplies.

MATS aircrews are trained specialists in the serious business of strategic airlift. Aircrews fly runs over the same routes they would use in time of war, to keep the airlift machinery well-oiled and always ready to go. MATS aircraft, however, don't fly empty. To make use of the airlift capability generated by training, they transport cargo, military personnel, dependents and government officials to and from overseas areas. Used in this manner, MATS' specialized talents are not neglected in peacetime. Therefore, they are not allowed to gather the rust of disuse.

On the west coast is the Naval Air Transport Wing, Pacific. It comprises VR-7 (flying), which is supported by VR-8 (maintenance). Both are based at NAS Moffett Field, Calif. However, they fly missions from Travis AFB, Calif. VR-7 also maintains Detachment ALFA at Tachikawa AB, Japan. Over the Pacific routes, strategic airlift squadrons fly the C-121 *Super Constellation*.

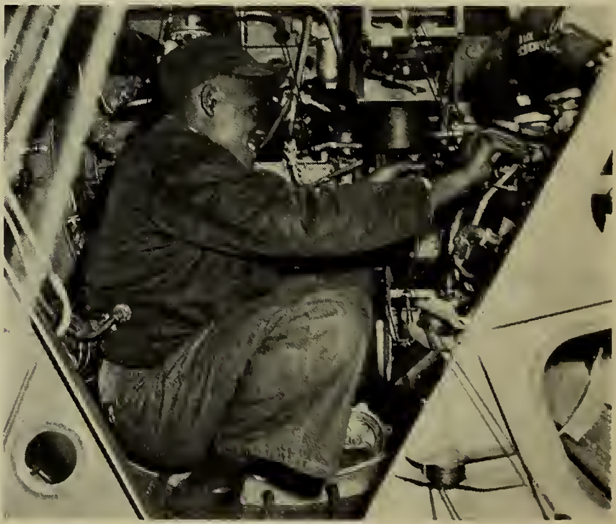
Operating from Travis AFB, Calif., VR-7 flies missions to Clark AB, Philippines, to Tachikawa AB, Japan, to Elmendorf, Alaska, and the "Embassy Run" to key southeast Asian countries. Once a week, a C-121 departs from Travis AFB, for Dhahran, Saudi Arabia, carrying government officials. From Travis, the run passes through Hawaii, Wake Island, Guam, the Philippines, Indo China, Thailand, India and Pakistan before it ends at Dhahran. At Dhahran, it connects with Eastern Air Transport Air Force MATS aircraft from Charleston AFB, S. C., to encircle the world with its international sky-highway of strategic airlift.

In addition to the Embassy Run and other special missions, VR-7 flies aero-medical evacuation flights, bringing armed forces personnel and dependents from overseas areas to the United States for medical treatment.

In Japan at Tachikawa AB, VR-7's Detachment Alfa flies daily runs over the Sea of Japan to Korea in support of the theater commander. This year the detachment will receive C-121s, replacing the older C-54 *Skymasters*.

New or old, however, aircraft alone don't determine capability. Pilot experience, tempered and molded by training, is an important asset in the MATS organization.

KEYED UP—Naval Air Transport Wing personnel man accounting machines. *Rt:* Hydraulic system is checked.



Illustrating this is the way one pilot in the Pacific pitted his skill against a common enemy of all aviators, as described below.

"ON THE GLIDE PATH . . . 500 . . . 400 descending slowly," GCA coached.

"Field not in sight!" yelled the co-pilot.

The pilot threw power into the engines, lifting the aircraft back to holding altitude.

This was LCDR Russell L. Stokke's fourth attempt to land the MATS C-121 *Super Constellation*, carrying 76 passengers, at Midway Island's air field.

Departing from Tachikawa on a routine flight to Travis, the aircraft commander had not known he would encounter bad weather over Midway. Midway was hidden under an avalanche of rain, causing zero visibility.

Fuel tanks nearly empty, the aircraft commander sought a solution to avoid disaster. He decided to head for Kure, a tiny coral atoll, 50 miles from Midway and seldom charted on maps. Radio contact with GCA elicited reports of favorable weather over Kure.

In a few minutes, Kure in sight, the *Super Connie* slowly descended toward the short, unimproved 4000-foot coral airstrip. Wheels screeched as they touched the crusted coral. Brakes brought the aircraft safely to a halt.

The Navy crew, headed by LCDR Stokke, received the Air Force Commendation Medal for their "good show." They, and all MATS crews, were well prepared for situations like this, because of training given by Air Force and Navy instructor pilots at Tinker AFB, Okla. The Navy pilot instructors are administratively assigned to the Naval Air Transitional Training Unit, but are integrated into the 1707th Air Transport Wing, the "university" of MATS. For their outstanding accident prevention program in 1961, this wing won both the MATS Commander's Trophy for ground safety and the MATS Trophy for flying safety, becoming the first wing in MATS history to win both in the same year.

TEAM WORK—Navy and Air Force work together during changeover to USAF system. *Rt:* Navyman checks load of supplies before flight.

IN 1961 NAVY AIRCREWS, alongside Air Force crews, helped lower MATS' accident rate for the ninth consecutive year — to a rate of 1.08 accidents for each 100,000 hours of flying time.

Since MATS' birth in 1948, Navymen in Navy squadrons have worked with the Air Force units assigned to MATS in meeting sudden demands for rapid airlift of men and material. Such actions, for example, as the Berlin airlift and the Korean conflict show the remarkable record that MATS, a pioneer unified command, could achieve while functioning as a team.

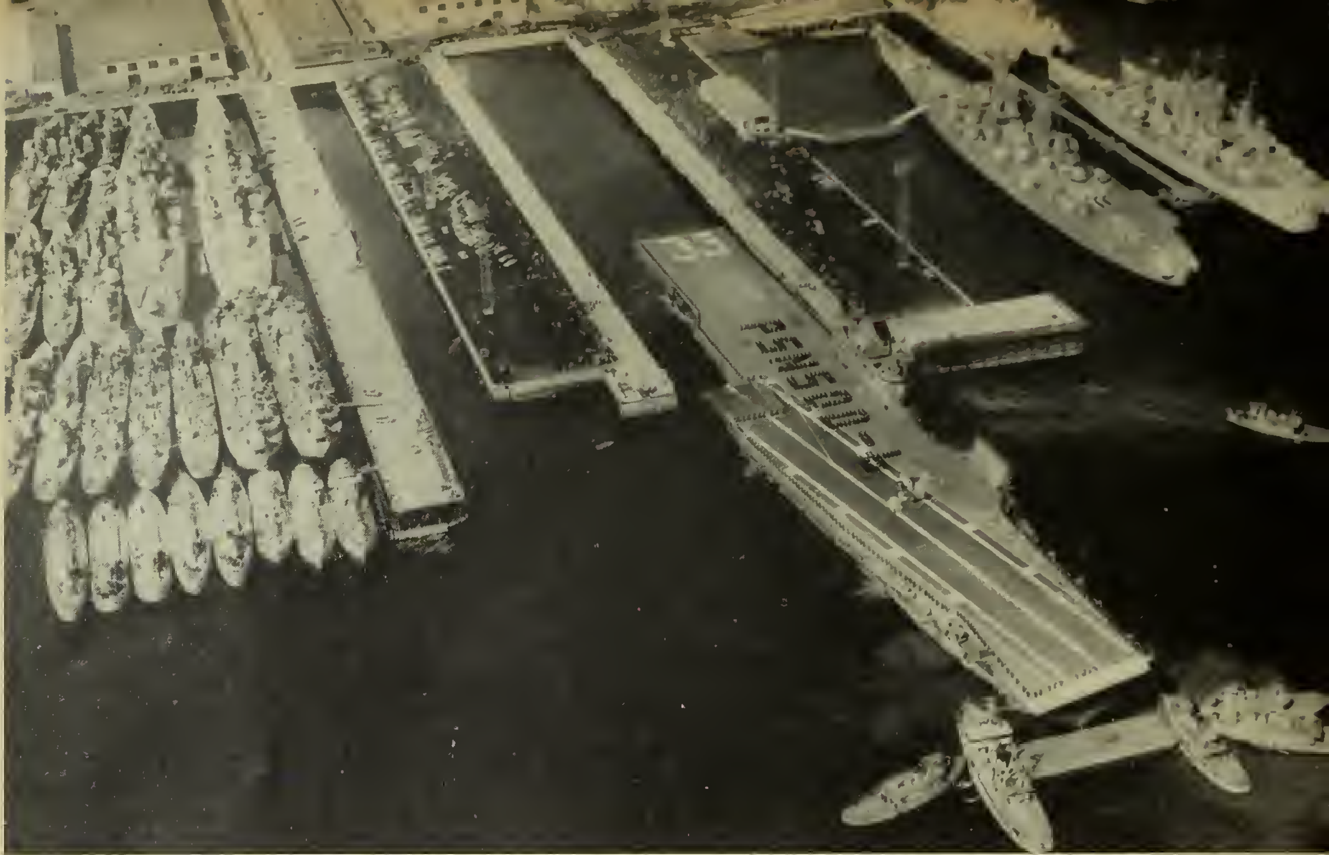
In the Berlin airlift, Navy and Air Force crews together hauled more than two million tons of food and fuel. During the Korean action, June 1950 to July 1953, MATS airlifted some 50,000 combat casualties to the United States.

Maintaining the high performance level set by the first Navymen in MATS, Navy squadrons entered 1962 participating in two major exercises.

McGuire-based VR-3 and Moffett-based VR-7 joined with MATS Air Force squadrons in Exercise *Long Thrust IIA* and *Great Shelf*.

Since its birth, MATS, through its Navy and Air Force wings and squadrons, has continued to live up to the promise — "anything — anytime — anyplace."

AIR AMBULANCE—Military Air Transport Service also furnishes aeromedical evacuation flights bringing patients stateside for treatment.



BIG ENTRY—*USS Kearsarge* (CVS 33) moves into the world's largest drydock during dedication ceremonies.

World's Biggest Drydock

A six-foot, eight-inch hospital patient in need of bed rest would be in tough shape indeed if the biggest bed available were only six feet long and two feet wide. That's just about the situation that has been facing our Pacific Fleet supercarriers for some time.

Several existing drydocks are capable of berthing our carriers, but they simply aren't wide enough to permit sufficient working space between the inboard dock edges and the sides of supercarriers' hulls.

But that's all been changed now, with completion of Bremerton Drydock No. 6, Puget Sound Naval Shipyard. The dock is the world's largest, in terms of cubage.

Several foreign drydocks are longer, but none, anywhere, can match its combined dimensions of length, depth and width.

Even supercarriers, the Navy reasons, are going to need their bottoms scraped once in a while. Some three and a half years ago several civilian firms, working under contracts let and administered by BuDocks, began construction at the Puget Sound Naval Shipyard, Bremerton, Wash. And late this past April uss *Forrestal* (CVA 59), *Kitty Hawk* (CVA 63), *Constellation* (CVA 64), *et al,* were assured of plenty of room to stretch out, when the world's big-

NOT WET YET—Super dock is shown *(left)* when almost complete. *Rt:* USS *Kearsarge* had plenty of room.

gest drydock was dedicated and flooded.

NavShipYd Bremerton's mammoth new pride and joy is 1,152 feet long, 180 feet wide, and 61 feet deep. Its total cost comes to approximately 24 million dollars, including more than a million and a half man-hours of on-site labor. Included also are 150,000 cubic yards of concrete, 8300 tons of reinforcing steel, and 5400 tons of sheet steel piling. Some 600,000 cubic yards of dredging, and nearly a million and a third cubic yards of fill and backfiill were required to create the 17-acre site for its construction. Amazingly, however, the huge structure can be filled to its 88 millon-gallon capacity in just 90 minutes — at a rate of better than 1,760,000 gallons per minute.

The floating caisson closure for the drydock was a major construction project in itself. It is 176 feet long, 63 feet high, and 20 feet wide, and weighs 2800 tons. Other related construction includes two 150-foot wide working spaces flanking the dry dock. Both of these are paved with asphalt, and contain tracks to accommodate shipyard cranes.

Tunnels on each side of the dock provide space for various mechanical and electrical utilities. A continuous service gallery contains connection points, and seven service stations are installed on each side. There are, too, a 5000 cfm compressor installation, a two-story service building, three electrical substations and six 112-foot high floodlight towers.

Most people can take statistics or leave them alone. For those, however, who are intrigued by this type of thing, here are a few comparisons.

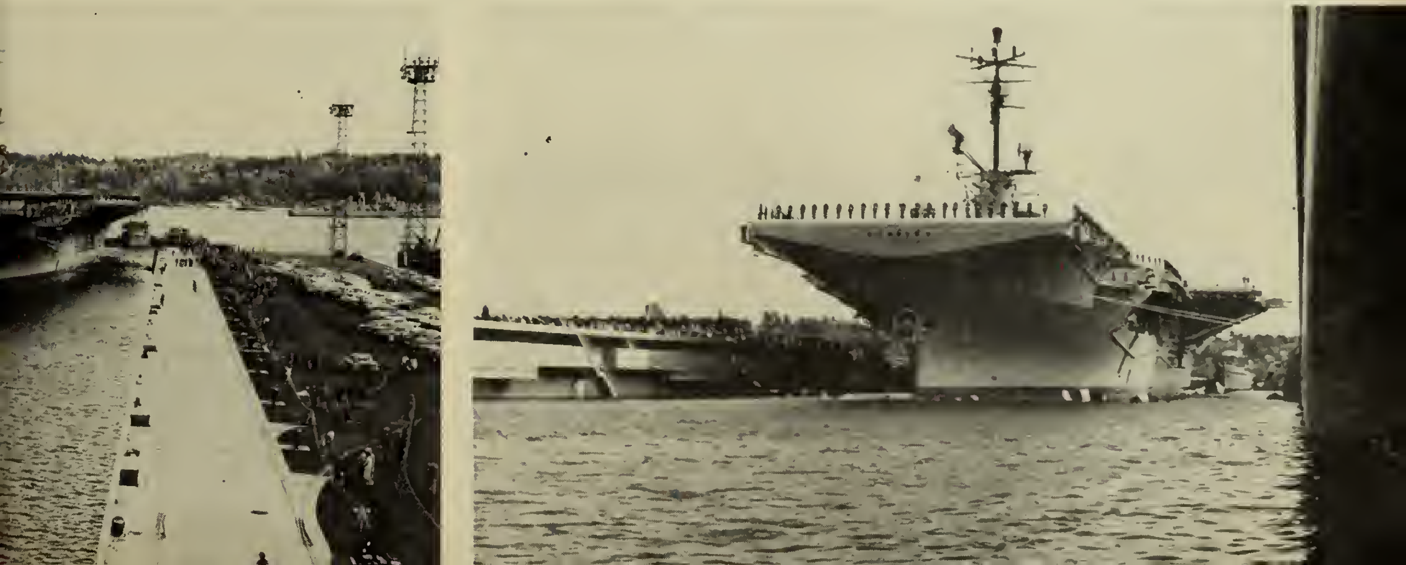
BIG SPLASH—Flooding gates allow 1,760,000 gallons per minute to flow into dock. *Below:* Pumps empty out 456,000 gallons a minute.

Concrete used in the Bremerton drydock, for example, would be sufficient for the foundations of about 7500 average houses — or 78 miles of two-lane highway — or 600 miles of sidewalk. Steel used in the structure would build some 3100 medium-sized automobiles.

The dock itself would hold 12 Washington Monuments — or 1,660,000 bales of hay. Its floor is large enough to accommodate three football fields or 36 basketball courts — and still have room for spectators.

Navy families that are heading out to Seattle, Wash., to see the World's Fair will also have a chance for a look-see at the world's largest drydock, in nearby Bremerton.

SUPER SERVICE—Navy's new dock measures 1152 feet in length, 180 feet in width and is 61 feet deep.



Waves Celebrate Tw

THIS MONTH the Waves celebrate their 20th anniversary as part of the naval establishment. From a small group of women, qualified to perform just a few jobs, the organization has developed into an integral part of the Navy. Today, women serve in 21 Navy enlisted ratings. Many commissioned women officers serve at naval activities ashore and overseas – and one is now serving at sea (aboard a military transport.)

Although the establishment of the Waves (see box, page 22, for background on the name) in July 1942 was the first major step the U.S. had taken to integrate them into the Navy, women had long before served in a military status. The Navy's first women were nurses – the Navy Nurse Corps was established in 1908.

The history of women in the Navy began to expand in World War I. In March 1917, Secretary of the Navy Josephus Daniels inaugurated the Naval Research program for Yeoman F, later popularized as "Yeomanette."

More than 11,000 Yeomanettes served the nation during WW I. They took over many desk jobs formerly held by men who were needed at sea. Yeomanettes served as clerks, translators, draftsmen, fingerprinters, camouflage designers and recruiting agents. They served in Guam, the Panama Canal Zone, France and Hawaii, as well as in the continental U. S.

By 31 Jul 1919, all Yeomanettes had been released from active duty, and it was again a man's Navy.

THE RAPID EXPANSION of the Navy for World War II brought about an acute shortage of personnel early in 1942. Officers and enlisted men tied down with shore jobs were needed at sea to man the growing Fleets of warships. Again, women were called upon to fill vacant shore billets and release the men for more strenuous duties.

In April 1942, the House Naval Affairs Committee recommended that a Women's Reserve be organized as part of the Naval Reserve. On 30 July a bill establishing the Women's Reserve was signed by President Roosevelt. The legislation provided that women could serve in – not merely with – the Navy, subject to regulations and legislation which governed the Reserve. Stipulations in the bill limited women to service inside the continental U. S., provided they would not exercise military command over men, and specified that the highest rank for a woman would be that of lieutenant commander. On 4 Aug, 1942, Miss Mildred H. McAfee, president-on-leave of Wellesley College, was sworn in as LCDR, USNR, to head the new program for the Navy.

Decades in the Navy

THE FIRST YEAR of training women in the Navy was more or less experimental. Navy expectations were exceeded; the first year's enrollment was almost three times the size expected when the WAVES were authorized.

Smith College at Northampton, Mass., was selected as the first WAVES officers' school. An account of the arrival of Smith's first officer trainees described the women as "purposeful and determined . . . carefully culled from thousands of applicants as officer material." The youngest in the group was 21; all had been previously graduated from colleges or universities, and many had been established professional women in private life.

In that initial program, 129 women were trained at Smith as future naval officers. A broader training program for women officer candidates was established on 6 October, and 900 young women reported to the new U. S. Naval Reserve Midshipmen's School at Northampton.

The following month a branch of the school was opened at Mount Holyoke College, South Hadley, Mass.

Schools for enlisted women were established in October at the Universities of Wisconsin and Indiana, and Oklahoma A & M., to train communicators, storekeepers and yeomen, respectively.

In all, the first year of the Waves saw the establishment of 16 training schools for enlisted women, and the Naval Reserve Midshipmen's School for officers. Women were trained in gunnery and blind-flying instruction, aerology, aviation ground crew work, navigation, communications, and other fields.

In duty assignments, all but a small percentage had either directly replaced Navymen or were assigned billets born of Navy expansion which would otherwise have been filled by men. After one year, approximately 17,000 women officers and enlisted women were on the job and 10,000 others were in training.

BY THE WAVES' SECOND ANNIVERSARY (30 Jul 1944), the number of women on active duty had increased to 72,350. The limitations on officer ranks had been removed (November 1943), and provision had been made for one woman officer to be appointed to the rank of captain. The WAVES' director, Mildred McAfee Horton, was consequently promoted.

As the war months progressed the Navy's women entered many new fields. Enlisted WAVES received six weeks of training at the recruit training school, Hunter College, New York, after which they learned new skills at 20 Navy schools or on the job, to boost Navy's womanpower.

PIPING OVER—Wave CPO Rita D. Roche, USN, retires from active duty.

In September 1944, Congress passed a bill which authorized WAVES to volunteer for duty outside the continental U. S. Four months later a group of enlisted women arrived at Pearl Harbor, Hawaii.

In July 1945, the number of WAVES on active duty was 86,000. By that time, women had taken over 18 per cent of all the Navy's U. S. shore jobs; their presence had released 50,000 men for duty afloat or overseas.

After three years with the Navy, WAVES were on duty at nearly every type of shore activity – air stations, hospitals, district headquarters, Navy yards and supply depots. Fifty-five per cent of the uniformed naval personnel in the Washington area were WAVES.

The Navy woman's responsibilities had increased considerably. WAVES handled about 80 per cent of the work in administration of the Navy mail service. In "Radio Washington," the nerve center of the Navy communications system, WAVES comprised 75 per cent of the total allowance.

The Bureau of Naval Personnel was graced with many WAVES (70 per cent), and at the Indian Head, Md., rocket power plant (which at the time did 70 per cent of the testing for all U. S. rocket propellants), WAVES operated the laboratory, worked in one of the two firing bays, performed ballistics calculations and other technical jobs. At that time, 38 ratings were open to enlisted women.

Thirteen thousand WAVES who served in the Hospital Corps tended to the sick and wounded. In Cleveland, Ohio, two WAVE pharmacist's mates ran the first all-WAVE dental prosthetic laboratory. WAVES played an important role in the Navy rehabilitation program by performing such duties as occupational and physical therapy, and instructing the blind, deaf and handicapped.

The role of women in naval aviation inspired the expression "Air Waves." There were lots of them; approximately 30 per cent of all WAVES worked in aviation—repairing planes, collecting weather information, training instructors and gunners, directing air traffic from control towers, operating Link trainers and packing parachutes.

Many even qualified as parachute riggers. In recent years, in order to graduate from the PR school at Lakehurst, N. J., each student, male or female, had to make a leap from an aircraft with a parachute he or she had packed. Hundreds of WAVES qualified as PRs during World War II. The jump, however, was not a requirement at that time. WAVES no longer serve as PRs, but there are still women on active duty who were trained in the rating and made the leap to qualify.

Most WW II WAVE officers served as administrators, language specialists, radio and radar technicians, lawyers, communicators and educational services officers. Nearly 400 served as medical specialists (lab-

Wave Convention Highlights

Highlight of the Waves' 20th anniversary activities is the National Convention to be held at the Statler-Hilton Hotel in Washington, D. C. later this month (26-29 July). The convention is open to all Waves, Regular or Reserve, active or inactive.

Registration for the activities opens at noon on 26 July. At 1600 the same day registration and festivity will be combined during "Registration on the Rocks."

On Friday, 27 July, the first wave of Waves – that is, the 200 women first to register – will take a special tour of the White House. Also on Friday, time is available for sightseeing and visits with Congressmen. The Reunion Reception at the convention hotel will be followed by attendance at the famous Evening Parade at the Marine Barracks.

"Business and Buffoonery," scheduled for Saturday morning, 28 July, will combine a business meeting with a humorous review of the Waves' 20 years. The Saturday evening banquet will be held at the Sheraton-Park Hotel. Those in attendance will include the Secretary of the Navy, the Vice Chief of Naval Operations, past Wave directors, present directors of all the women's services, and government officials who were prominent in the establishment of the WAVES. Mrs. Douglas Horton, the Waves' first director (Captain Mildred McAfee,) will be toastmistress.

On Sunday, breakfast will be followed by a special memorial service at Arlington National Cemetery.

Waves may also participate in post-convention tours to San Juan, Puerto Rico, or southern Virginia.

Advance registrations may be mailed to: WAVES Twentieth Anniversary National Convention, 1616 K St., N. W., Washington 6, D. C. The Convention "package" including the banquet is $20. The only event which may be purchased separately is the banquet, at $10.

oratory technicians, dental hygienists, occupational and physical therapists, etc.). Forty-one lady doctors served in the Medical Corps, and there were two women dentists and two women civil engineers now on duty in the Navy.

WAVE officers at air activities included aerologists, air transport officers and air navigation instructors.

Before the war ended, approximately 80 women officers had been designated as Naval Air Navigators. They were the first women in any U. S. military organization entitled to perform duties as part of a military air crew.

After World War II the total of women on active duty decreased greatly, and by September 1946, most Navy women had been discharged or released to inactive duty.

Captain Mildred McAfee Horton was relieved by Captain Jean T. Palmer on 2 Feb 1946; the outgoing wartime director was awarded the Distinguished Service Medal for her leadership. (Captain Palmer was succeeded by Captain Joy Bright Hancock on 26 Jul 1946.)

During the war the WAVES had proved their worth and the Navy was reluctant to give up its programs for women. A number of Navy women were retained in service, but, by the fourth anniversary of the program, only 9800 remained on active duty.

On 27 Mar 1946, the Navy asked Congress to authorize the enlistment and appointment of women into the Regular Navy and Naval Reserve. More than a year later WAVE legislation was approved by the Senate, but, before final action on the bill had been taken by the House, Congress adjourned.

When Congress reconvened, the Navy again requested legislation for the integration of women into the permanent structure of the Regular Navy. The Women's Armed Services Integration Act, Public Law 625, was passed by the Senate and the House and signed by the President. It became law on 12 June 1948, marking another step forward.

This was perhaps the most significant milestone in the history of the WAVES. Women were now given full partnership on the Navy team; the Women's Reserve was abolished; and women, for the first time, became a part of the Regular Navy.

BACK THEN — Yeomanettes pose on Liberty Loan Drive in 1919.

The 1948 act provided that the number of enlisted women would not exceed two per cent of the authorized active enlisted strength of the Regular Navy, and that the number of commissioned and warrant WAVES would not exceed 10 per cent of the authorized number of enlisted women.

The Navy's first move in implementing the new legislation got underway the day after the President signed the bill. The word came out of Washington that, effective immediately, Reserve women could enlist in the Regular Navy. On 7 Jul 1948, the first enlisted women were sworn in.

In May 1949 the Navy announced that it intended to assign WAVES to billets overseas. A token assignment was effected in advance — three WAVE officers had been ordered to duty in London; another to San Juan, Puerto Rico; and another had been temporarily assigned to Europe for the Berlin Airlift.

The modern WAVES, however, were no strangers to overseas service. Enlisted women had been serving as flight orderlies on board military transport planes which flew to Germany, Bermuda and the Caribbean area from the East Coast, and to Hawaii and Alaska from the West.

At the same time the Regular Navy opened to women, the Reserves established a program for WAVES. The new laws abolished the Women's Reserve and authorized the transfer of all members to appropriate components of the permanent Naval Reserve.

On the WAVES' seventh anniversary — 30 Jul 1949 — 3216 Navy women were on active duty.

The eighth year of women in the Navy brought wider areas of assignment and changes in the officer uniforms. Enlisted WAVES were assigned to overseas billets in London, officers were assigned to duty in

WAVES attend Link Celestial Navigation school during World War II.

Guam, Egypt, Alaska and Germany and on 10 Feb 1950, the first wave of WAVES to pull duty in Hawaii since 1946 departed the U. S. for Pearl Harbor.

The tradition that "women don't serve at sea" was broken when WAVE medical officers were ordered to duty on board hospital ships.

At the outbreak of the Korean conflict, the Navy recalled many WAVE Reservists to active duty. In July 1950 there were 3239 WAVES on active duty; a year later the number had nearly doubled.

In 1951 the WAVE Recruit Training Center was transferred from Great Lakes to Bainbridge, Md.

On the 10th anniversary of the WAVES, women were occupying Regular Navy billets both in the continental U.S. (at 250 stations) and at many overseas bases. Four hundred WAVES were on duty in Alaska, Hawaii, England, Japan, France, Germany, Norway and Italy.

GOOD DUTY—Carol Owens, YN3, USN, checks office file while pulling duty on island of Hawaii.

During the 11th year of the WAVES a program was established to give outstanding enlisted women the opportunity to receive commissions in the Regular Navy. Also, on 1 June 1953, Captain Louise K. Wilde relieved Captain Hancock as director.

By the end of the 11th year, enlisted WAVES were serving on board hospital ships and transports which moved dependents between the U. S. and overseas installations; the regulations that had landlocked enlisted women had been changed. (Sea duty has since become one of the most popular duties among the women in blue, as indicated by the long list of WAVE HMs waiting for shipboard duty.)

In 1954, navy women celebrated their gold hashmark anniversary. Many enlisted women had been on active duty long enough to rate the gold service stripes which signify 12 years of good conduct. Also that year, the first class of the new officer candidate training program for women reported to the women officers' school at Newport, and the peacetime strength of the WAVES was fixed at 500 officer and 5000 enlisted.

Captain Wilde was relieved as WAVES director (or, Assistant Chief of Naval Personnel for Women) by Captain Winifred R. Quick (Collins) in August 1957. Next month, Commander Viola B. Sanders will be promoted to captain and will relieve Captain Collins as director.

Today there are approximately 700 officer and 6000 enlisted WAVES on active duty. All in all, after two decades of service with the Navy, the WAVES have been around for many changes, including the growth of the atomic Fleet and many advances into space. They have kept up with the changing times, filling many billets never dreamed of when Congress passed the legislation 20 years ago.

There is, of course, still a limitation on the employment of women in the Navy. WAVES are prohibited from serving in aircraft on combat missions, on shipboard (except hospital and transport ships), or in jobs which require considerable physical strength.

But the WAVES keep up with Navymen in other areas. There are now 46 WAVE master and senior chief petty officers. And, at NAS North Island, San Diego, Calif., last April, Barbara D. Metras, SKC, became the first enlisted woman of the U. S. armed forces to complete 19 years and six months of active duty. She thus became eligible for transfer to the Fleet Reserve.

— Dan Kasperick, JO1, USN.

Here Is How the Waves Got Their Name

This is how the Navy's Waves got their name. The report is in the words of Dean Virginia C. Gildersleeve, who was Chairman of the Advisory Council for the Women's Reserve of the Navy from 1942-1945. Here, in part, is her account:

The Navy expressed a desire to have an attractive and pronounceable combination of letters which would form a word representing the full title of the Women's Reserve – like the British WRENS and ATS. Something had to be done hastily about this before some repellent nickname became current.

I read in a New York newspaper one day an article regarding the possible enlistment of women by the Navy using in the headline the word "Sailorette"! When Professor Elizabeth Reynard [who was to become the second woman to be sworn in as an officer of the U.S. Navy, and was at that time assigned as a Special Assistant to the Chief of the Bureau of Navigation] telephoned me the next evening on her return from Washington I complained of this.

"The Navy feels just the same," she said. "When the top brass saw 'Sailorette' you'd think they'd struck the Inchcape Rock. They ordered me to suggest immediately something nautical, suitable, fool-proof, and attractive."

"And what did you say?"

"I said, 'Aye, aye, sir.' I've just been inventing something on the train. When I got to Penn Station I telephoned it back to the Bureau. They seem favorably impressed."

"What is it?" I demanded. "Well," she continued, approaching the subject cautiously, "I realized that there were two letters which had to be in it: W for women, and V for volunteer, because the Navy wants to make it clear that this is a voluntary and not a drafted service. So I played with those two letters and the idea of the sea and finally came up with 'Women Accepted for Volunteer Emergency Service'—W.A.V.E.S. I figured the word 'Emergency' will comfort the older admirals, because it implies that we're only a temporary crisis and won't be around for keeps."

I agreed. The name was accepted with considerable enthusiasm by a majority of the naval officers involved and it caught on with the public immediately.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept. Washington 25, D. C.

Long Liberty

Sir: According to Article C-6209, *BuPers Manual*, liberty may be extended to 96 hours if a Saturday or Sunday is included.

Earlier this year, I requested special liberty from 0745 on 22 February (a legal holiday which fell on Thursday) to expire at 0745 on 26 February, Monday morning. Included in this period are a holiday, a Saturday and a Sunday.

My request was denied because it exceeded 72 hours. Liberty of a longer duration, I was told, must be specifically authorized by the Chief of Naval Personnel.

I believe that I could have been granted this 96-hour liberty in accordance with Article C-6209. Am I right? — J.T.M., YN1, USN.

- *Nice try, but it's not in the book. You should look again at the entire Article C-6209(4). It says: "When specifically authorized by the Chief of Naval Personnel, commanding officers may grant liberty for periods up to 96 hours, providing the days of Saturday and Sunday are included in such periods."*

Further clarification is contained in Article 1284, Para. 2, of "Navy Regulations." It says: "Liberty may be granted at any time for a period of 48 hours or less. A 48-hour period may be extended to 72 hours by the commanding officer if the period includes a holiday which is proclaimed by the President or authorized by the Secretary of the Navy. The Chief of Naval Personnel or the Commandant of the Marine Corps, as appropriate, may authorize officers commanding units or activities for which normal liberty is inadequate, because of isolated location or the nature of duties performed, to grant liberty periods not to exceed 96 hours, provided the days of Saturday and Sunday are included in such periods."

It seems fairly clear to us that these articles are intended for use only in unusual circumstances. In addition, such liberty must be specifically authorized by the Chief of Naval Personnel in each case. You can bet the reason would have to be very good to get Bureau approval.

If you want the opinion of someone other than the officer in the Bureau who would approve or disapprove such a request, we suggest you look at the "Bluejackets' Manual." Although this is an unofficial publication, the information contained therein is normally correct. Page 159 (16th Edition) says: "The normal 48-hour liberty that is granted for week ends may be extended to 72 hours if the period includes a national holiday." Since the 23rd of February separated the holiday from the week end, it just will not fit into 72 hours. — Ed.

Repairs to the Flag

Sir: One of our recruiters, during a recent visit to a high school, was asked, "Officially, can the national ensign be cut off and hemmed when it has become frayed from use? What is the total length which may be cut off?"

This recruiter, a boatswain's mate, stated that it was common practice aboard ship. However, a search through the various regulations and publications available at this command has failed to reveal an authoritative answer. Is there an official regulation on this subject?—E.A.H., Jr., LT, USN.

- *Art. 118.2 of DNC 27, "U. S. Naval Flags and Pennants, Descriptions, Uses and Customs," states: "Minor repairs may be made to the ensign as required to maintain its fitness as an emblem."*

There are no specific limitations on the extent of repairs. — Ed.

One Day Off

Sir: The *BuPers Manual*, Article C-7821(4)(a) defines a regular Enlisted Performance Evaluation Report, NavPers 792, as one which is submitted semiannually as of 16 May and 16 November and which covers the entire evaluation period or a significant portion thereof.

In the upper right hand corner of the front side of this evaluation sheet are blanks in which should go the inclusive reporting dates. Could you tell me what these inclusive dates should be for a regular semiannual report? I believe they should be 16 May to 15 November and from 16 November to 15 May. — J.C.B., DKC, USN.

- *While you have plenty of company (several petty officers who have had some experience with evaluation reports thought the same as you) the dates you give are not correct.*

The inclusive dates for the semiannual enlisted evaluation report should be 17 May to 16 November and 17 November to 16 May. — Ed.

Flags and Pennants

Sir: I have been a signalman for six years. During this time, I have had and heard many arguments concerning the half-masting of colors underway.

On page 59 of your October 1961 issue you discuss this situation, but I have not been able to ascertain where you obtained your information. Is it your interpretation of DNC 27 (Article 115.1), or is the information taken from another publication?—T.W.V., SM2, USN.

- *Our information was taken from both "U. S. Navy Regulations, (Chapter 21, Sections 8, 9 and 10) and from "U.S. Naval Flags and Pennants — Descriptions, Uses and Customs" (DNC 27).*

"Navy Regulations" was our (as it should be your) last-word authority for honors and ceremonies. DNC 27 is a guide, but is not intended to be the sole source of information regarding flags and pennants. That job belongs to "Navy Regs."

You should keep one point in mind when you read "Navy Regs" for your information about the half-masting of colors. Unless specifically indicated otherwise, references to ships half-masting the ensign pertain to underway periods as well as periods when not underway. — Ed.

First Navy-Wide Exams

Sir: When were the first Navy-wide examinations for advancement in rating given after World War II? — M.S.L., EMC, USN.

- *The first Navy-wide examinations, as we know them today, were conducted on 1 Jul 1950.*

The Chief of Naval Personnel had, however, controlled the number of advancements even before that. BuPers Circular Letter 191-46 (in 1946) placed advancements to CPO and PO1 under quotas assigned by the Chief of Naval Personnel.

In 1948 Circular Letter 155-48 was issued. It put all advancements under quotas issued by the Chief of Naval Personnel. Circular Letters have since been replaced by BuPers Instructions and Notices. — Ed.

STEAMING into San Francisco after 22 months in the Far East, USS *James E. Kyes* (DD 787) displays a 400-foot homeward-bound pennant.

Proceed Time

Sir: My division officer and I have a question on proceed time. Here are the circumstances:

LT X was ordered from the Naval Hospital at San Diego to the Naval Training Center, also at San Diego, for temporary duty. His orders specified that he was to report immediately.

Subsequent message orders from BuPers directed that he be detached from his temporary duty at the Naval Training Center and report to the commanding officer of the Service School Command at San Diego for duty relieving another officer.

I gave LT X four days of proceed time in reporting to the CO of the Service School Command, basing my action on Para. (j) of Article C5315 of *BuPers Manual.*

I was overruled by my division officer on the four days' proceed time on the contention that the orders for temporary duty at the Naval Training Center at San Diego from the Naval Hospital, San Diego, didn't specify "to proceed" but rather "to report immediately." Also, that the BuPers message orders omitted the words "to proceed."

Must orders specifically state "to proceed" before I can apply the provisions of Para. C5315 of the *BuPers Manual* to a case like this? If so, I had better get ready to eat my hat. — R.T.T., YN2, USN.

- *This is one of those cases which can cause great confusion.*

LT X was not entitled to four days' proceed time in that part of the move involved between San Diego Hospital and the Naval Training Center. This is because the orders expressed haste when they stated "report immediately." Our authority for this is Article 1229 of "U. S. Navy Regulations." This is also defined in Article C-5315(1) of the "BuPers Manual." LT X was entitled to a maximum of 12 hours' proceed time here.

In the move between NTC and the Service School Command, no particular haste was expressly indicated.

In this instance, the officer was legally entitled to four days' proceed time. It seems to us, however, that he should have taken only such time as was actually necessary to hie himself hence.

Now to your question regarding "proceed time."

Article 1229, "U.S. Navy Regulations," says that "An order from competent authority to an officer, requiring such officer to report for duty at a place, or to proceed to any point and report for duty, but fixing no date and not expressing haste, shall be obeyed by reporting within four days, exclusive of travel time, after its receipt for execution." From the foregoing, it will be readily apparent that the word "proceed" is not a requirement in orders in order to be entitled to proceed time. — Ed.

Advancement and Tour Dates

Sir: Does advancement to chief change the length of a tour ashore? I reported to shore duty in March 1961. Normally, I would go back to sea in March 1963 (shore tour for my rate is two years). Come November, however, I'll be putting on the chief's hat. Will my tour length be extended to three years (normal tour for MRC), or will it remain as it is? — J.G., MR1, USN.

- *Under Seavey-Shorvey, the date you rotate back to sea is recorded when you first report ashore. The rate you hold upon reporting is used as the tour guide. Advancing to a rate with a longer shore tour doesn't change your tour length once it has been recorded. You'll rotate on schedule. This is spelled out in the "Enlisted Transfer Manual," Art. 7.41c(3). Anyway, congratulations on making chief.* — Ed.

'B' Billets

Sir: When I completed GS Class "A" School in 1960, I was ordered to attend factory schooling, then report to my present ship for duty in a BuPers-controlled "B" billet.

There were no factory classes scheduled for that time so I was sent from there to the ship. Since then, I have attended no schools and my service record shows my NEC to be "0000."

Ship's records carry me and three others in identical situations in "B" billets. We are told that, since we are in "B" billets, we cannot be transferred from sea duty by EPDOLANT and that we can be involuntarily extended along with other "B" billet personnel.

We are ordered to fill "B" billets but without BuPers code numbers. Are we Bureau-controlled personnel?— T.A.B., GS2, USN.

- *Indeed you are. You are being retained in a "B" billet because of the critical shortage of GS personnel throughout the Navy and because of the on-the-job-training you have received in your ship. (Incidentally, for those who don't know the term, a "B" billet refers to any billet filled by a detailer in the Bureau of Naval Personnel. For more info, see the Seavey-Shorvey issue of* ALL HANDS, *May 1962.)*

Even though you did not receive factory training and have an NEC of "0000," you will continue to be carried and ordered ashore in a "B" billet when an adequate relief is found.

The official word on this subject can be found in Para. 3b of BuPers Inst. 1306.69 entitled "Billets and Rates Controlled by the Chief of Naval Personnel." — Ed.

Search for Gooneybird

Sir: USS *North Carolina* has been enshrined by the people of North Carolina as a memorial to all service men and women of World War II and is being exhibited, as closely as possible, in its wartime condition.

The Navy has been most cooperative in assisting us in procuring various articles of equipment to add authenticity to this exhibit, but we have been unable to locate an OS2U-3 *Kingfisher* on floats, which, we think, would add greatly to the memorial and rekindle memories in the hearts of old sailors who were associated during World War II with the "Gooneybird."

We would appreciate it if ALL HANDS would inform its readers that we are searching for a plane of this type to be preserved on board as a permanent exhibit.

One of your readers, somewhere, may recall seeing one of these planes which we might obtain to remind the public of the important role played by battleship pilots during World War II. — G. Andrew Jones, Jr., Secretary, USS *North Carolina* Battleship Commission.

- *Any* All Hands *readers knowing the whereabouts of a "Gooneybird" (Midway Island readers, please discriminate) can get in touch with Mr. Jones at Post Office Box 629, Raleigh, N. C.* — Ed.

Opportunity for Officer Training

Sir: I have, under my supervision, an airman whose goal is to become a naval officer. He enlisted in the Regular Navy for four years, hoping to qualify for the Naval Academy. He has taken the entrance examination for the Academy twice, but has not been selected, and now realizes he does not have sufficient education to achieve his goal. His GCT (55) ARI (48) and MECH (47) scores are not, to my knowledge, high enough to qualify him for any other programs.

He will have completed two years of active duty in August of this year. He has requested a release to inactive duty to enroll in college to meet the requirements for the Naval Aviation Cadet program. Upon completion of his education he would return to active duty and complete his obligated service. However, I have been unable to find any instruction which authorizes this sort of request.

This boy is very "military minded," and has expressed his desire to make the Navy his career. Please advise if there is any instruction covering this situation, or what action he might take to achieve his goal.—C.J.S. ADRC, USN.

- *Article C-10307 of the "BuPers Manual" prohibits a release to inactive duty for the express purpose of attending school, accepting civilian employment, etc.*

As for the alternatives — individuals serving on continuous active duty, who possess a minimum of 60 semester or 90 quarter hours of satisfactory college work, are eligible to apply for the Naval Aviation Cadet program regardless of GCT, ARI and MECH scores. Requirements for this program are contained in BuPers Inst. 1120.20B.

The airman might find it possible to gain some of the necessary credits through off-duty-hours attendance at a nearby college or university, or through USAFI correspondence courses. He might decide to go out of the Navy temporarily two years from now, get in the necessary college work, and then make another try for the Naval Aviation Cadet program.

Whatever he decides to do, we hope he makes it. The Navy could use more men with his attitude. — Ed.

THE GUIDED missile cruiser *USS Oklahoma City* (CLG 5) returns to U. S. after being relieved of her duties as flagship of the Seventh Fleet.

Vernon County *Answers Up*

Sir: I couldn't help noticing the article in the September 1961 issue of All Hands (page 24) titled "Stars for *Lorain County*." I also agree that seven reenlistees in one day is sufficient to stimulate a boastful attitude. However, USS *Vernon County* (LST 1161), homeported in Yokosuka, Japan, should also be entitled to a fair slice of the cake.

Since our first STAR reenlistment on 19 Nov 1960, which as far as we know was the first in the Navy, *Vernon County* has chalked up 19 reenlistments, nine of which were under the STAR program. This number may also seem insignificant but, according to your figures, a ship the size of *Forrestal* would need to reenlist more than 655 men per year to equal our total.

I believe a record such as ours should come somewhere around the outstanding mark. How about it? — ENS J. A. Tallerico, USNR.

- *Although it's obvious that you have done a fine job in the reenlistment business, we refuse to grade you without further information.*

The way we see it (again using an approximate figure of 100 men in your crew), you reenlisted about 19 per cent of your crew during a one-year period. We did check your arithmetic, and we figure 19 per cent of a crew of 3000 (the approximate figure we used for a Forrestal *class carrier) is 570 men. Although this is still a sizable number of men, the difference between your arithmetic and ours is almost enough to man another tank landing ship.*

You were also a little behind in your first STAR claim. We don't know who was the first STAR to be reenlisted, but we did run a picture of one of the first in our November 1960 issue. He reenlisted aboard USS Randolph *(CVA 15) during the week of 23 Sep 1960, about two months before your first man reenlisted.*

We don't know what your reenlistment rate was for fiscal year 1961 (although we suspect it was high), but we thought you might be interested in the Navy's over-all reenlistment rate for that year. It was 44.3 per cent. This percentage is a combination of the career rate and the first term rate. The first term reenlistment rate was 27.8 per cent. The overall percentage is quite a bit higher than that of a few years ago, and much of the credit must go to you men of the Fleet who push such programs as STAR. You do a fine job. Keep it up. Any other STAR-makers? — Ed.

Proper Uniform for HMCS

Sir: In the letters section of the December 1961 All Hands a USN correspondent, identified as an HMCS, enquired whether badges should be worn on collar and sleeve while serving with a Marine unit. The question does not seem to be valid.

Everyone knows the HMCS stands for Her Majesty's Canadian Ship. Therefore, your correspondent should wear the white ensign at the taffrail, the Canadian blue ensign at the jackstaff, the white masthead pennant at the fore truck, and a red maple leaf on either side of the funnel. I enclose a diagram (see cut). — Philip Chaplin, LT, RCNR.

- *We've dropped a line to Senior Chief Hospital Corpsman C. B. H. suggesting that he return the courtesy by sending an enlarged rating badge to your ship.* — Ed.

The Mothball Fleet

SIR: Below you will find a poem entitled "Mothball Fleet," which I hope you will consider for publication in a forthcoming issue of ALL HANDS Magazine. — R. C. Steensma, LCDR, USNR.

- *Poems, other than New Year's logs, usually don't find their way into* ALL HANDS. *But, after circulating yours among members of our staff, we decided to bend our long-standing rule just far enough to let our reader audience share in your views. We enjoyed it.* — ED.

Upon Viewing the Pacific Reserve Fleet at San Diego

LCDR Robert C. Steensma, USNR

Grey ghosts, aging somnolently
Under a hazy and caressing sun
Like hoary heroes reminiscing
Of old battles and victories dim
And mottled in misted memory.
Voiceless now the full-throated guns,
Quiet the once-throbbing flight decks,
Stiff and indolent the antennae
Once pulsating with electric urgency,
Lifeless the berthing and messing spaces
Filled now with still air and dessicant,
Sleeping now the sea-furies
With cracking paint and salt-rotten decks
Listening to the gliding gulls' cries
And the haunting memories wafted
On the soothing sea-wind:

Memories of the birth-pangs —
Throngs of the sweating cursing midwives
Wresting the burgeoning titans
From the wombs of countless shipyards
With cold steel and white-hot rivets.
Memories of champagne bottles,
Florid buntings, clichéd speeches,
And surrender to the first caress
Of the loving water at way's end.
Memories of the tortuous sea-trials
And stern approval of the sea-masters
Amid the urgency of time and war.
Memories of the battle-test,
Of jagged, piercing metal-wounds,
Of dead, grotesquely twisted bodies
And the sacrificial smoke and blood.
Memories of the deaths of sisters
In the fiery breath of a hundred campaigns
In a hundred God-forsaken lonely places —
Leyte, Coral Sea, Midway, Okinawa,
Attu, Makassar Strait, and China Sea.
Memories of victory's ache and tears,
And searing despair of nagging defeat.
Memories, too, of clamorous home-comings,
The speeches and tumult of V-J Day.
And memories of the mothballing
And towing to the resting-places,
And memories of a nation's quick neglect.

Memories, memories — the stuff
That gives life to men and ships —
Memories rise and linger and fall
In rhythm with the lapping wavelets.
And the circling gulls' eerie cries
Under the cynically indifferent skies.

Saluting When Not in Uniform

SIR: Is it proper for a Navyman attired in an athletic uniform to salute the national ensign while boarding or leaving his ship? This question is being tossed around by our ship's baseball team. Some of the team's members do not salute the colors when leaving the ship or returning after a game. They say "It's not proper to salute if not in full Navy uniform."

I say they should salute, if covered, even if the cover is a baseball cap or football helmet. The basis for my argument is *Military Requirements For Petty Officer 3 & 2* (NavPers 10056), which states that members of an athletic team or working party should salute the national ensign, if covered, regardless of the type of headgear worn, if their hands are free. Also, *U. S. Navy Regulations* (Art. 2108) notes that Navymen, upon coming on board ship, shall salute the national ensign if it is flying. This latter reference says nothing about not saluting if not in Navy uniform, so I interpret this as applying to all Navymen, no matter what they happen to be wearing. — D.G., YN3, USN.

- *Your interpretation is correct. The "Navy Regs" article you cite means exactly what it says. No mention of uniform is made because the type of uniform worn has no bearing on the matter — each person shall salute the national ensign whether or not he's in uniform.*

If you read a little further through "Navy Regs" you'll note in article 2110, paragraph 5, that persons not in uniform should salute in accordance with civilian customs, except when saluting another person in the armed forces, in which case the hand salute should be used. This also applies to the colors — use the hand salute. — ED.

Record for World Cruises

SIR: We, the members of Commander Mine Squadrons Seven and Nine, would like to know if anyone can top the following record racked up some time back by one of our shipmates, Radarman First Class Edwin N. Bowe, USN.

Between 5 Sep 1951 and 19 Aug 1954 — a stretch of just two years, 11 months — Radarman Bowe made four world cruises in four different ships. He shipped in, successively, the destroyers USS *Bristol* (DD 875), *McGowan* (DD 678), *Gatling* (DD 671) and *D. H. Fox* (DD 779). — E.W.D., YN2, USN.

- *Well, let's see now. There was this guy Magellan . . . .* ED.

HHE Weight Allowances

SIR: I have a question that has been kicked around for about as long as I can remember. Perhaps you can answer it for me.

How many pounds of household effects can a single man ship on a permanent change of station? Some say a single man can ship none, while others contend he is limited to 400 pounds. What's the correct answer? — O.E.F., AMS1, USN.

- *Your marital status has no effect on the weight allowance of household effects that may be shipped at government expense. The only requirements are that you be a petty officer second class or above or a third class petty officer with over four years' service. Marital status isn't mentioned.*

Here are the non-packed weight allowances for each rank and rate:

Rate or Rank	Temporary Duty	Permanent Duty
Admiral	*2000*	*24,000*
Vice Admiral	*1500*	*18,000*
Rear Admiral (upper half)	*1000*	*14,500*
Rear Admiral (lower half)	*1000*	*12,000*
Captain	*800*	*11,000*
Commander	*800*	*10,000*
LCDR and Warrant Officer (W-4)	*800*	*9500*
LT and Warrant Officer (W-3)	*600*	*8500*
LTJG and Warrant Officer (W-2)	*600*	*7500*
Ensign and Warrant Officer (W-1)	*600*	*7000*
Master Chief Petty Officer	*600*	*7000*
Senior Chief Petty Officer	*500*	*6500*
Chief Petty Officer	*400*	*6000*
Petty Officer, First Class	*400*	*5500*
Petty Officer, Second Class	*400*	*5000*
Petty Officer, Third Class (with four years' service)	*400*	*4500*
Aviation Cadet	*400*	*400*

All grades of admiral are currently limited to 11,000 pounds of household effects by appropriation act rider.—ED.

Steam Sloop San Jacinto

SIR: A ship's bell was recently removed from the cupola atop the U. S. Coast Guard Base Administration Building at Key West, Fla. An inscription on the bell reads as follows: "U. S.

Steamer *San Jacinto,* U. S. Navy Yard, Washington, 1851." The building from which the bell was removed was (according to the records) the first building erected in NavSta Key West proper, but there exists no local information, that I can find, as to the origin of the bell.

Any information you could furnish me concerning this bell and/or the steamer *San Jacinto* would be appreciated.—R.W., LT, USCG.

- *A search of* San Jacinto *records in the National Archives reveals that no logs for that ship exist before 26 Feb 1852. There is no mention made in the letters of the Commandant, New York Navy Yard, during 1851 of* San Jacinto *receiving a bell, nor is there any record in the letters of the Commandant, Washington Navy Yard, for 1852 that she stopped there en route to Norfolk. Moreover, there is no record of the casting of any ship's bell in the Washington Navy Yard in 1851.*

San Jacinto *was a ship of 1567 tons, built at the New York Navy Yard in 1850, and classed first as a steam frigate and later as a steam sloop.*

She initially served in the Mediterranean Squadron from 1851-53, and, following repairs at the Philadelphia Navy Yard, sailed again in August 1854 on a special service cruise, after which she served as flagship of the East India Squadron in 1856-57.

San Jacinto *next served with the African Squadron in 1860-61, where she was involved in helping to suppress the slave trade. On her way home from that duty, in November 1861, she intercepted and seized Messrs. Mason and Slidell, Confederate Commissioners to England, who were on their way there as passengers on the British mail steamer* Trent. *After delivering her prisoners at Boston and refitting, she joined the East Gulf Blockading Squadron from 1862-64. She served part of that period as Squadron flagship, and made a number of captures. She was wrecked on No Name Key, Great Abaco, Bahama Islands, on 1 Jan 1865 which brought an end to her salty career. —* Ed.

Submarine Duty for BMs and PNs

Sir: I have heard of cases in the recent past in which BMs and PNs, two ratings not normally assigned to submarine duty, have attended basic submarine school and are now serving in submarines.

If it is possible for either of these ratings to apply for submarine training or duty, I would appreciate your advising me of the necessary procedures. —H.N.H., PN1, USN.

- *There were BM billets on board submarines during World War II and, more recently, when troop transport submarines were operational. There are, at present, 10 BMs serving in the submarine forces, including staffs.*

They have become qualified submariners and have continued in submarines, filling billets for other ratings because there is now no justification for BM billets on board.

There was a time when a shortage of YNs led the Navy to use PNs for submarine duty. Twelve are still in submarines. Generally speaking, however, the Navy does not consider this a satisfactory arrangement.—Ed.

Time Caught Speeding

Sir: In the April 1962, All Hands letters section (Wants To Score, p. 26), reader L.D.S., YN2, enlisted in June 1958 and "completed a four-year hitch last June." I find this somewhat amazing. The way I figure it, the period June 1958 to June 1961 is three years. Did reader L.D.S. perform so spendidly he was credited with an extra year? Or did All Hands goof? — W.E.W., YN3, USN.

- *Your closing query contains a profound truth. —* Ed.

PHIBPAC's Jim Henry grabs for loose basketball in off-season game with San Diego Marines.

What Happened to Panther?

Sir: What ever happened to my old ship, USS *Panther?* I served on board her from January 1914 to September 1919. When I left her, she was at Bordeaux, France, and I have heard no more of her since. Could you please publish a short account of her activities?—H.O., LTJG, USN (Ret.).

- *Glad to.* Panther *was an auxiliary cruiser built in Philadelphia in 1889 and purchased by the Navy Department in April 1898. She was commissioned on 22 Apr 1898, and served in the North Atlantic Fleet until 1900. From 1900 to 1902 she was at the Navy Yard, League Island, Pa.; 1902-03 with the North Atlantic Fleet and Caribbean Squadron; 1904-07 auxiliary to the Receiving Ship* Lancaster *at League Island, and out of commission.*

On 18 Nov 1907 she was recommis-

POLAR PUSHUPS—B. M. Anderson, PH1, USN, of VX-6, gets in shape at McMurdo Sound, Antarctica.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Louisville* (CA 28) — A reunion is scheduled for 3, 4 and 5 August at the Hotel Henry Clay, Louisville, Ky. For details, write to Wilmer E. Morrison, 527 Lincoln Ave., Collingswood 7, N. J.
- USS *North Carolina* (BB 55) — A reunion at Wilmington, N. C., is scheduled for early August. For further information, write to Paul A. Wieser, 532 Princeton Rd., Linden, N. J.
- USS *Thomas Jefferson* (APA 30) — The 15th annual reunion will be held at the Statler Hilton Hotel, Boston, Mass., on 1 September. For information, write to Clifford Phelan, 25 Esterbrook Rd., Lexington 73, Mass., concerning reunion plans.
- *29th Seabees* — The 16th annual reunion is scheduled for the Statler Hilton Hotel, St. Louis, Mo., on 16, 17 and 18 August. For further information, write to Leonard J. Knoll, 10346 Edgefield Dr., St. Louis 36, Mo.
- *Operation Deep Freeze IV* — A reunion for those who took part in the 1958-59 Operation Deep Freeze IV is scheduled for the Schroeder Hotel, Milwaukee, Wis., on 17, 18 and 19 August. For details, write to LCDR L. J. Green, CEC, USN, U. S. Naval Torpedo Station, Keyport, Wash.
- USS *Roy O. Hale* (DE 336) — All who served from commissioning to 1946 who are interested in holding a reunion may write to Wayne Waddle, USN&MCRTC, Denver Federal Center, Bldg. 20-F, Denver, Colo.
- USS *Rochester* (CA 124) — Those who served from 1956 to 1959 who are interested in holding a reunion may write to Robert L. Brandt, 626 San Bernardino, Pomona, Calif.

sioned, and served as Fleet auxiliary and repair ship in the North Atlantic Fleet until 1916. Her next major assignment began in July 1918, when she went to Brest, France, as tender to the Destroyer Force. She continued in this duty until 1921.

From 1921 to 1922 she was attached to the Asiatic Station. She was placed out of commission and sold in March 1923.—Ed.

Incentive Pay for Polaris Crews.

SIR: I am writing in the hope you can enlighten me and many other surface sailors as to the need for payment of extra incentive pay to the "off" crews of Fleet Ballistic Missile submarines. This is a point which causes frequent — sometimes quite heated — discussions between submariners and non-submariners.

I do not mean to imply that *Polaris* sub crews don't earn this incentive pay while at sea, but I wonder why it should not be terminated when the crew is rotated ashore. It should be noted that there is a restriction on the payment of sea pay for periods during which Navymen drawing such pay are TAD or otherwise ashore over a certain period of time. Why don't these same restrictions apply to the crew members of these certain submarines?

We all agree that the life of the average submariner involves many inconveniences. Inconveniences, however, are not confined exclusively to the submarine Navy. For example, destroyer force sailors who man the radar picket destroyers probably spend as much time at sea during a year as the average *Polaris* crews.

There has been some talk in recent years concerning granting of veteran's benefits to men who have entered the service since the Korean conflict. This idea has been consistently sidetracked for many reasons, chief of which appears to be lack of funds. Why wouldn't it be better to allocate funds for this purpose, rather than for payment of incentive pay to personnel not actually earning it? Aviators must fly to earn flight pay, divers must dive to earn diving pay. What makes these FBM submariners so special?

I realize this is a touchy subject. I hope, however, that you can furnish me the real reason for this use of funds which I feel could be employed in a more important and constructive fashion. — W.E., YN3, USN.

- *Your inability to divine the reason behind full-time incentive pay for* Polaris *crews stems, quite possibly, from the fact that you are on shore duty, and not, so to speak, in the same boat as a submariner. As is the case with almost any discussion, it is helpful to look at facts from both sides. We suggest that you put yourself in the place of the submariner while you consider the following answer to your question, and see if the reasons behind such payments don't then become a lot clearer to you.*

Men for Polaris *ships must be recruited from among the crews operating in our submarine force. These men are, in the vast majority of cases, already receiving submarine pay on an annual basis. This is what they anticipate when they are assigned to an operating submarine, except for infrequent periods of attendance at a school or some other extraordinary duty absenting them from their ships for 16 days or more.*

Under these circumstances, they can hardly be expected to volunteer for other submarine duty (Polaris) *for which they would receive incentive pay only two-thirds of the time at most. This is particularly true when the duty for which they are asked to volunteer —* Polaris *submarine duty — is even more arduous than that which they have been performing, is at least as hazardous, and requires, prior to assignment to an FBM submarine, an extensive period of training, during which they will not receive submarine pay.* — Ed.

It Beats Me.

SIR: I recently finished reading the Navy Training Course booklet, *Yeoman 3 & 2 (NavPers* 10240-C). There seems to be a discrepancy in Chapter Five.

The text indicates that Maine is one of seven states that should not be abbreviated. Yet the quiz at the end of the chapter says Maine is abbreviated Me.

Should it be abbreviated or not? — A.R.E., YN3, USN.

- *Maine should not be abbreviated. The 1961 reprinting of NavPers 10240-C corrects this. The other states that should not be abbreviated are Alaska, Hawaii, Idaho, Iowa, Ohio and Utah.* — Ed.

KD Unit Gets Around

SIR: From time to time we read in ALL HANDS various letters from Navymen in the Fleet who claim "firsts" or "records" for themselves or their commands. We figure it's about time you heard from the Pacific Fleet's KD Unit 25 of Utility Squadron 5. We think we have established a record of sorts.

During a period of three years (January 1959 to January 1962) KD 25 served on board 35 different ships. They were: USS *Etlah* (AN 79), *Tillamook* (ATA 192), *Mahopac* (ATA 196), *Alamo* (LSD 33), *Hamilton County* (LST 802), *Vernon County* (LST 1161), *Windham County* (LST 1170), *Tom Green County* (LST 1159), *Washoe County* (LST 1165), *Washtenaw County* (LST 1166), *Westchester County* (LST 1167), *Whitfield County* (LST 1169), *Terrell County* (LST 1157), *Cayuga County* (LST 529), *Zelima* (AF 49), *Sirius* (AF 60), *Bremerton* (CA 130), *Saint Paul* (CA 73), *Brush* (DD 745), *Thomason* (DE 203), *Ranger* (CVA 61), *Hancock* (CVA 19), *Bennington* (CVS 20), *Thetis Bay* (LPH 6), *Pine Island* (AV 12), *Mauna Kea* (AE 22), *Grapple* (ARS 7), *Chanticleer* (ASR 7), *Hitchiti* (ATF 103), *Takelma* (ATF 113), *Mataco* (ATF 86), *Cocopa* (ATF 101), *Abnaki* (ATF 96), *Sioux* (ATF 75) and *Ute* (ATF 76).

We have records to back up our claim and invite any and all units to try to top it. — D.E.B., AT1, USN, and H.L.A., ADC, USN.

- *It appears* ALL HANDS *is lucky that KD 25 slowed down long enough to write a letter. We suspect some frogmen, amphibians, Seabees, or even another airdale unit will produce some statistics to challenge your claim to fame. (For the information of readers not familiar with airdale lingo, KD is a unit which maintains the pilotless aircraft, or drones, at which ships blast for target practice.)* — ED.

Medical Care After Discharge

SIR: I have a problem. My wife is expecting, and the estimated date of the baby's arrival is the same one on which I will be discharged from the Navy.

My wife is now being treated under the Medicare program. What will happen if the baby isn't born until after I am discharged? Can she still be treated under this program for a short period of time, or will this care stop the minute I am discharged? — R.C.B., AQB3, USN.

- *If the event occurs sometime before 2400 on the day you receive your discharge, the Navy pays. After that time and date, you must pick up the tab.*

Para. 16 of SecNav Inst. 6320.8A states, "In case a dependent is an inpatient at a uniformed service facility at the time the member . . . is discharged from the service, . . . the government's responsibility for furnishing such a person medical care under the Dependent's Medical Care Act ceases at 2400 hours of the date of such event."

MANNED AND READY—A gunnery crew of *USS Los Angeles* (CA 135) undergoes training at sea.

Paragraph 24C of this same instruction states, ". . . The government's responsibility ceases, so far as the dependent or member is concerned, as of 2400 hours on the date the dependent, for any reason, ceases to be entitled to receive care from civilian sources at government expense. . . ."

This leaves no doubt. Your wife becomes ineligible for benefits of medical care at government expense at 2400 on the date you are released from active duty. (This would not be true, of course, if you were retiring or being transferred to the Fleet Reserve.) Any medical care received after your separation from active duty is your responsibility, not the Navy's. — ED.

Nine Battle Stars for Laws

SIR: Can you supply me with some information on USS *Laws* (DD 558)? My father served in *Laws* during the Second World War. — J.P.

- USS Laws *was named for LT Alexander Laws,* USN, *who, while a midshipman with Stephen Decatur, sailed the ketch* Intrepid *under the guns of Tripoli's harbor to burn the U. S. Frigate* Philadelphia, *which had been captured by the Tripolitans.*

Laws *was commissioned late in 1943 and played an active role in the Asiatic-Pacific Theater during World War II.*

Her duties were routine for a few months until 10 Jun 1944 when she stood out with RADM J. B. Oldendorf's battleship force en route to Saipan where she screened the escort carriers while they made their air strikes.

Early in the evening of 17 June, Laws *opened fire on enemy planes which were attacking the carriers. Her AA barrage scored two sure kills and one assist. Another enemy raid began about 24 hours later and* Laws' *guns again aided in breaking up the attack.*

Laws' *other contacts with the enemy during the remainder of her career were similar to her first. She supported Fleet operations around Saipan, Palau, the Philippines, Leyte, Formosa, Okinawa and the China coast.*

Early in February 1945, Laws *became a pioneer radar picket ship as the war moved relentlessly toward the Japanese home islands.*

Laws *was ordered to Pearl Harbor in September 1945, where she picked up a load of homebound enlisted men.*

She arrived with her happy cargo at Bremerton, Wash., on 24 September and was placed out of commission and in reserve. She was reactivated in October 1961.

During her career, Laws *earned nine battle stars on the Asiatic-Pacific Area Service Medal. She was typical of the many destroyers that performed a tough, vital job in World War II.* —ED.

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Superintendent of Documents
Government Printing Office
Washington 25, D.C.

ENCLOSED find $2.50 for a subscription to ALL HANDS magazine, the Bureau of Naval Personnel Information Bulletin, to be mailed to the following address for one year

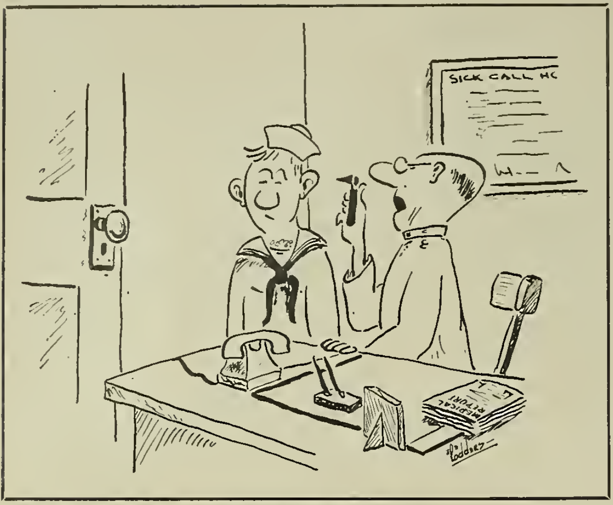
NAME..

ADDRESS...

....

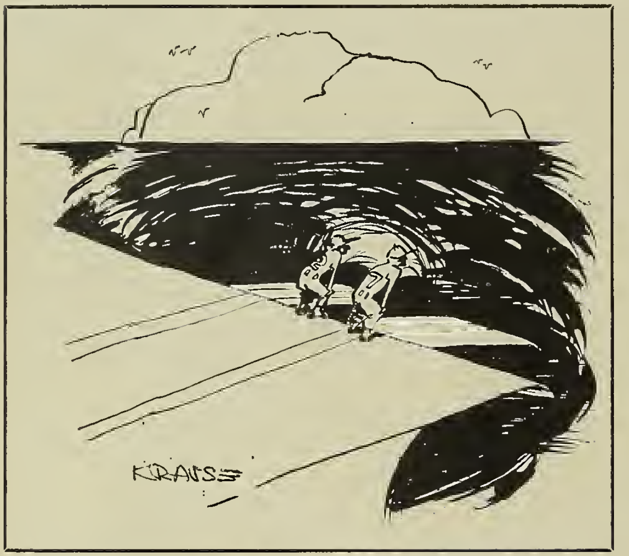
(For prompt filling of orders, please mail this blank and remittance direct to the Government Printing Office. Make checks or money orders payable to the Superintendent of Documents.

SECOND **E. E. LODDERS, DMSN, USN**



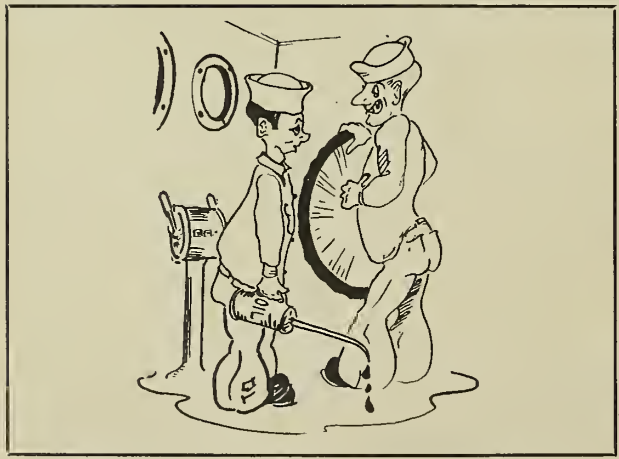
"There seems to be some kind of shiny obstruction . . . no, that's the door knob."

THIRD **J. E. KRAUSE, SN, USNR**



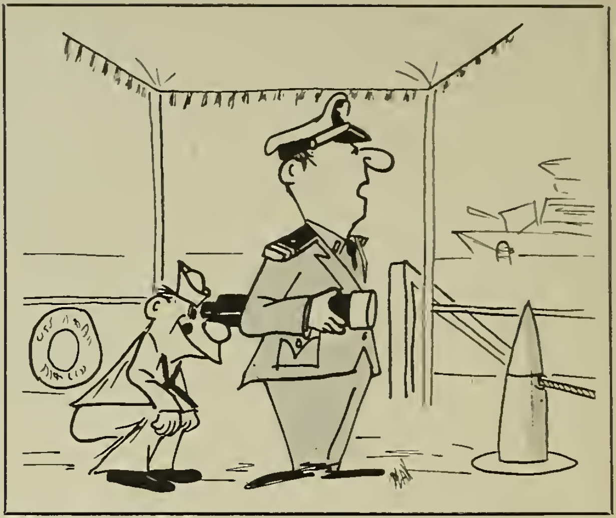
"He should have let it go, it was foul any way."

FOURTH **E. J. GEISLER, YN1, USN**



"Where's that relative bearing I'm supposed to oil?"

FIRST **LTJG T. K. DEAN, USNR**



"Notify the CDO that Miss Naval District and her court are arriving."

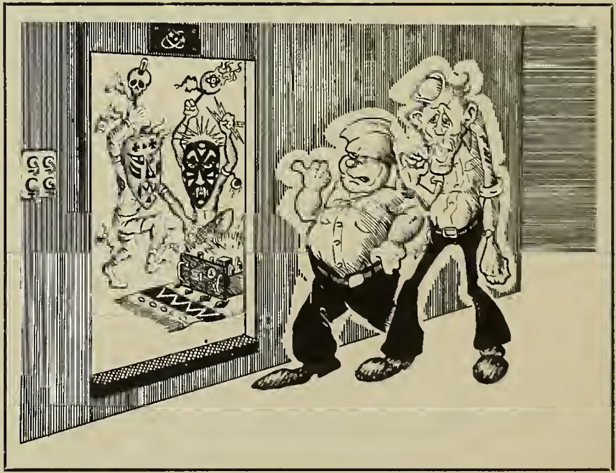
Cartoon Champs

THE NAVYMAN's choicest forms of humor oftentimes poke fun at himself — and the entries in the seventh annual All-Navy Cartoon Contest are certainly no exception.

From among the hundreds of entries which poured into the Bureau of Naval Personnel, 10 winners — first, second, third, fourth and fifth place; plus first, second, third, fourth and fifth honorable mention — were selected. And, not surprisingly, the judging panel found itself faced with some extremely tough decisions, as the humor of the subject matter and the skill in drawing were, if anything, of an even higher caliber than in previous years.

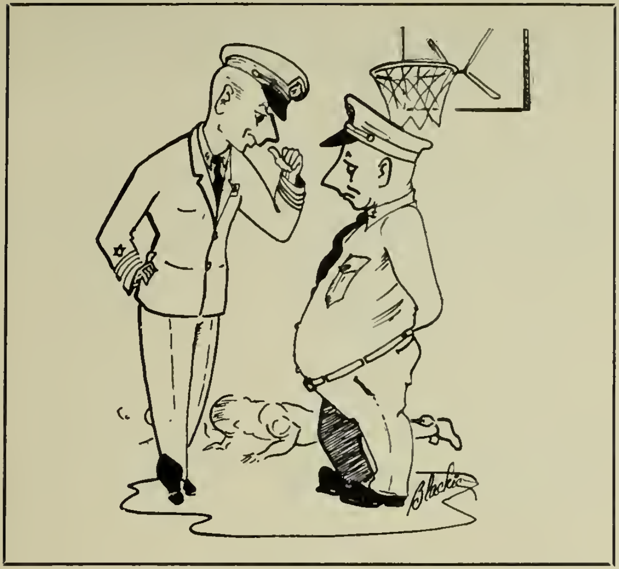
However, a final ballot finally produced a winner — LTJG Thomas K. Dean's portrayal of the sailor's perennial delight at the sight of a pretty girl. Champ cartoonist Dean serves at the Naval Amphibious Base, Coronado, Calif.

FIFTH **J. R. THORNTON, SOG2, USN**



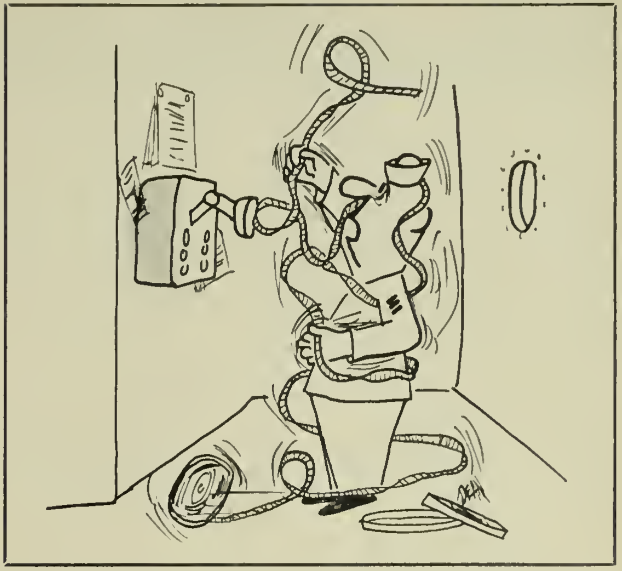
"Beats me how they do it, but you gotta hand it to the ET's around here for getting the gear fixed quick."

FIRST HONORABLE MENTION **E. J. GEISLER, YN1, USN**



"Physical fitness exemption for those over 40 doesn't mean the size of the waistline, Chief!"

SECOND HONORABLE MENTION **LTJG T. K. DEAN, USNR**



"Now the name of the movie to be shown on the mess deck is . . . is . . ."

He is also one of this year's two double winners — another of his efforts, depicting the frustrations of a ship's movie operator, won him the second honorable mention spot.

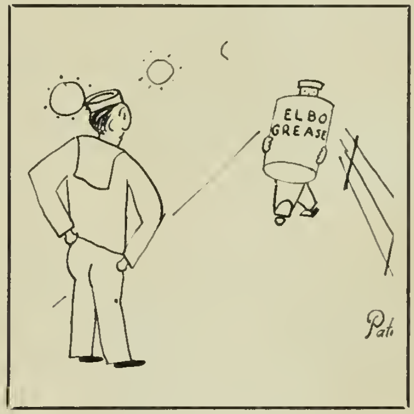
Another double winner was Yeoman First Class Emmet J. Geisler, USN, of Flag Allowance, COMCRUDESPAC Headquarters, San Diego. Yeoman Geisler captured fourth place honors with a variation on an old theme — the starry-eyed innocence of the young boot seaman — and also copped first honorable mention with his version of physical fitness program, a popular subject.

Second place went to Draftsman Seaman E. E. Lodders of the Illustrator Draftsman School, CBC, Port Hueneme, Calif., for his cartoon-form coverage of one unfortunate sailor's visit to a Navy dispensary.

Seaman James E. Krause of the heavy cruiser USS *Newport News* (CA 148) sketched his way into third place with a look at one of the problems encountered in underway athletics. And Sonarman Second Class John R. Thornton of the U. S. Naval Facility, San Salvador, Bahamas, edged into fifth place.

Third, fourth and fifth honorable mention awards, meanwhile, were grabbed off by: Radioman Second Class James E. Robinson of Flag Allowance, Commander Training Command, Pacific Fleet; Senior Chief Engineman (SS) William K. Munn of the Atlantic Fleet submarine *Grampus* (SS 523); and Draftsman First Class C. P. Patrick from CBC, Port Hueneme.

FIFTH HONORABLE MENTION
C. P. PATRICK, DM1, USN

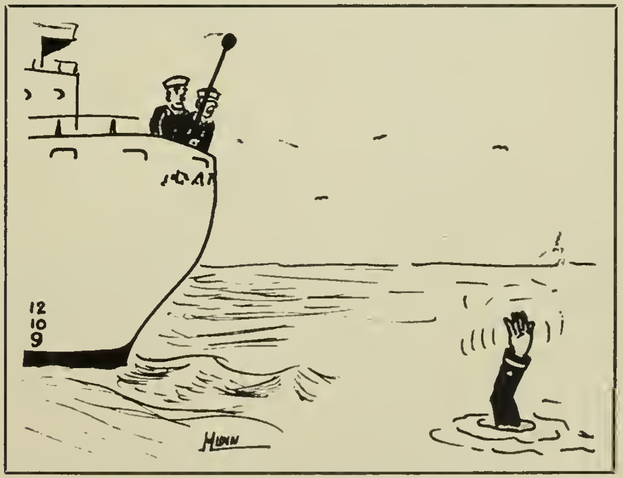


"Well, I'll be darned!"

THIRD HONORABLE MENTION **J. E. ROBINSON, RM2, USN**

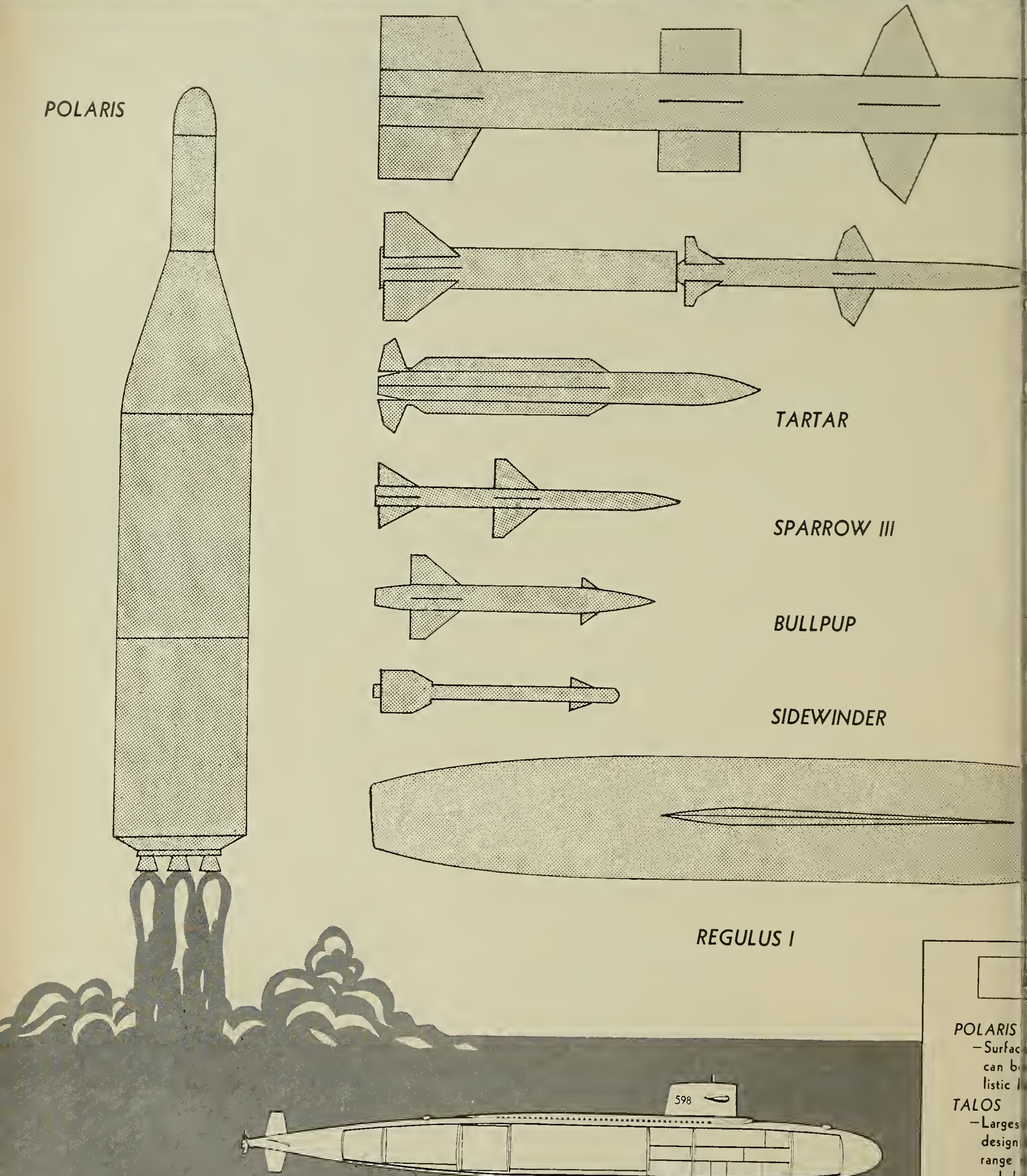
"One . . . . . ."

FOURTH HONORABLE MENTION **W. K. MUNN, ENCS(SS), USN**



"That was not the proper way to dip the ensign."

NAVY OPERATIONAL



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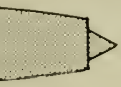
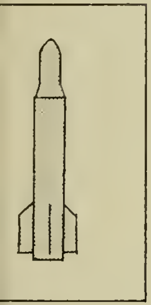
ALL DRAWINGS OF MISSILES AN

ISSILES AND ROCKETS



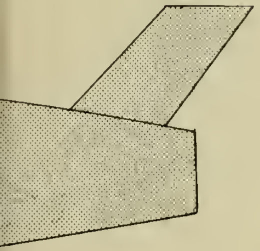
TALOS

TERRIER



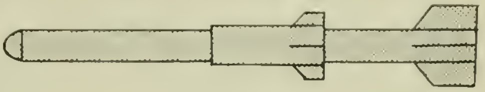
SUBROC

mensions classified

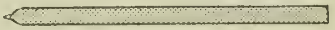


Asroc ready for loading.

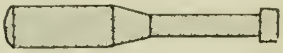
Subroc breaks surface.



ASROC



ZUNI



ALFA

ROCKETS

ASROC

—Rocket-assisted antisubmarine warfare torpedo fired from surface ships.

ZUNI

—All-weather rocket used by attack aircraft against ground targets.

ALFA

—Surface-to-underwater rocket fired from DEs as an ASW weapon.

USS *Dewey* (DLG 14) launches *Terrier* missile.

Sparrow III leaves launcher of F3H *Demon.*

UIDED MISSILES

-surface, deterrent/retaliatory missile
d by submerged or surfaced Fleet Bal-
le subs.

hipboard surface-to-air missiles, it was
r guided missile cruisers. It has long
can be used effectively against shore
ystem automatically selects and loads
l trains and elevates launchers, all in

TERRIER

—Medium range surface-to-air missile system having capabilities similar to those of *Talos* system. Designed for cruiser and destroyer type ships.

TARTAR

—Smallest of the Navy's surface-to-air missiles—similar to *Terrier* except for shorter range. System has automatic features similar to those of *Talos* and *Terrier*. It was designed for destroyer type ships or as secondary battery on larger ships.

SPARROW III

—Air-to-air missile for use against high-performance aircraft in all kinds of weather. Also allows head-on attacks.

BULLPUP

—Air-to-surface missile, accurate and simple in design, for use against small defended targets—pillboxes, bridges, tanks, etc.

SIDEWINDER

—Air-to-air missile for use against high-performance aircraft. Homes with heat-seeking device and is relatively inexpensive.

REGULUS I

—This was the Navy's first attack guided missile to become operational. It is fired surface-to-surface.

SUBROC

—Guided missile fired from submerged sub's torpedo tube up through the air to re-enter the water for submarine killing.

OCKETS ARE ARTIST'S CONCEPTIONS

TODAY'S NAVY

ON DECK—Crew of *USS Lake Champlain* (CVS 39) celebrate carrier's 50,000th arrested landing—recorded by LTJG John J. Sheehan, III.

Polaris Support Sites

Three Pacific area locations have been designated as possibilities for the facilities required to support the Fleet Ballistic Missile Weapon System when *Polaris* submarines become an operational part of the Pacific Fleet.

They are the Puget Sound Naval Shipyard at Bremerton, Wash., for FBM Submarine Overhaul Facility; the Navy Ammunition Depot at Bangor, Wash., as the site for the *Polaris* Missile Facility and Pearl Harbor, Hawaii, as the location of the Pacific FBM Team Training Facility.

Aside from operational advantages, the major factor in selecting these locations was the economy to be derived from making maximum use of existing facilities.

Guided Missile DD No. 5

A new guided missile destroyer, USS *Biddle* (DDG 5), was commissioned at the Philadelphia Naval Shipyard in May.

Biddle was launched in June 1960. She is 431 feet long and displaces 3370 tons. She carries a crew of 24 officers and 330 enlisted men.

Biddle is armed with *Tartar* surface-to-air guided missiles, *Asroc,* antisubmarine torpedoes and two 5-inch/54 guns.

YESTERDAY'S NAVY

On 3 Jul 1950, USS *Valley Forge* launched strikes on airfields, supply lines and transportation facilities in and around Pyongyang, Korea. On 15 Jul 1941, the U. S. Naval Air Station and Naval Operating Base at Argentia, Newfoundland, were established. On 16 Jul 1945, the first atomic bomb test was made at Alamogordo, N. Mex. On 21 Jul 1946, an all-jet aircraft was tested for the first time on a U. S. carrier. On 25 Jul 1866, the grade of admiral was created by Act of Congress. On 31 Jul 1861, the office of Assistant Secretary of the Navy was created by Congress.

Nuclear Beacon for Atlantic

The Office of Naval Research is sponsoring the research program for a nuclear powered acoustic beacon now under development as a reference point for hydrographic ships in the Atlantic.

The Atomic Energy Commission has awarded a $60,000 contract for the development of a generator to power the beacon. The generator, designated SNAP 7-E (for Systems for Nuclear Auxiliary Power) is one of a series of power devices which the AEC is developing for use in the sea and in space as well as on land. It will be designed to provide about five watts of electricity for a period of at least two years.

The decision to power the beacon with a SNAP unit was dictated by the beacon's environment. It will be floating in deep water more than 100 miles from the nearest land where cable power or conventional batteries would be impractical.

The power principle for SNAP is similar to other units now being used as electric power sources for two developmental *Transit* navigation satellites, automatic weather stations in the Arctic and Antarctic and a navigational buoy in the Chesapeake Bay.

The fuel for the buoy (strontium tetairate) will not harm marine life and its melting point is so high that it could not be dispersed by the hottest gasoline fire. It is also almost insoluble in salt water.

Controlling the Shakes

Shake, rattle and roll may be all right on the dance floor but, for Navy pilots, it's strictly from Squaresville. That's the reason the Office of Naval Research has authorized continued study of vibrations.

The main purpose of the study is to find out what effect plane vibrations have on the performance of pilots and air crews.

Although aircraft vibrations are the basis of the study, the results could also be translated into terms applicable to land and water vehicles. Besides improving efficiency, the studies might lead to increased passenger comfort and more effective instrument design.

The studies were triggered by the knowledge that certain pilot tasks were considerably affected by vibrations. For instance, some pilots had difficulty reading their instruments accurately. Many found it difficult to actuate certain types of controls. Still others experienced physical irritation including severe nose itching, facial skin flutter and eyelid motion.

To conduct laboratory studies of vibration effects, an aircraft seat and instrument panel were placed on a platform actuated by a hydraulic cylinder to produce controlled vibrations at rates between one and 30 cycles per second and within amplitudes up to 20 inches at the lowest frequency and about one sixty-fourth of an inch at the highest.

The vibration tests are designed to simulate flights as low as 500 feet and speeds of more than 400 miles per hour.

Engineers expect the studies to point out which vibrations are the most detrimental to successful completion of missions. With these known factors, designers will be able to control some of them through aircraft structural design and rigidity and wing size, shape and sweep.

LA's Ninth Overseas Cruise

The heavy cruiser *USS Los Angeles* (CA 135) concluded her ninth overseas cruise in February and returned to her home port at Long Beach, Calif. The cruise — a seven-month tour of the Far East — got underway in Long Beach last August.

After a short visit to Hawaii, the cruiser sailed to the Orient for exercises with the Seventh Fleet and a tour of Far Eastern ports. One stop was at Beppu, a small resort town on the northeast coast of Kyushu, Japan. *Los Angeles* also visited Kobe, Kagoshima, Sasebo and Yokosuka.

In mid-December the cruiser departed Japan for Hong Kong, where she spent the Christmas holidays.

Next, a stop at Subic Bay in the Philippines for routine maintenance was followed by three weeks of underway training, after which the ship returned to Sasebo for a final look at Japan before sailing back to the States.

She's now undergoing overhaul at Long Beach, before starting out on her 10th cruise late this year.

JAPANESE barge shines after overhaul by crew of *USS Lexington.*

Lex Sailors Spruce Up Mr. Ono's Floating Orphanage

The Seventh Fleet's mighty USS *Lexington* (CVA 16) steamed into the harbor at Kobe, Japan, loaded with 3000 sailors anxious for shore leave.

Lexington's massive bulk was quite a contrast to two small barges operated by a somewhat unusual, middle-aged Japanese longshoreman named Mr. Ono.

What made Mr. Ono different from most men was that Mr. Ono had 25 children — all orphans — which he and an elderly mama-san kept on board the two barges, and found homes for others in various craft and pierside houses.

Somehow or other, word was received on board *Lexington* that Mr. Ono's orphan barges were pretty badly in need of a coat of paint.

"Why not?" said *Lex's* electricians and Marines. "It'll only take a day, and we'll be in Kobe for nearly a week. Let's paint them."

When they arrived at the dock to which the barges were tied, Mr. Ono, mama-san and the 25 orphans were lined up smiling and bowing a welcome.

It didn't take long for the would-be paint crew to find out the main deck was leaking, leaving water deposits below. The bilges were full of water, rats and sediment.

The biggest of the two barges, on which Mr. Ono and some of the orphans lived, proved to be in particularly bad shape.

The painters looked at one another. Their expressions were eloquent. "How can we paint a couple of tubs in this condition?" one seemed to say. "More to the point, how can we get out of it at this late date?" another seemed to ask.

A look at the 27 watching faces with smiles that had, by now, become questioning, seemed to provide the only answer.

First, the filth was disposed of. Then lumber, nails and tools were scrounged or bought so another deck could be built below the main one. A couple of *Lex's* carpenters came down to supervise the job.

On their last day in port, the men stepped back to see what they had wrought.

The two barges looked like miniature CVAs. The outsides sported a new paint job with grey hulls and black decks. Inside, bunk beds for 14 children had been built, each with its own built-in bookshelf. Partitions with sliding doors separated berthing spaces.

A mess deck had been set up and the old wiring had been ripped out and replaced.

Lexington's quartermaster donated some flags to be strung around the barges to brighten their appearance.

As *Lexington* steamed out of the harbor, a couple of the carpenters watched Kobe receding. They could see the barges shining in the sunlight with their flags flying in the breeze. Mr. Ono, mama-san and the 25 orphans were on the pier bowing a farewell to their benefactors.

Rescue from the Island of Nothing

Besides being something to look at in a mass of water that otherwise seems endless, Clipperton Island isn't much good for anything. The tiny (two and one-half miles in diameter), uninhabited ring of coral, which dots the Pacific 700 miles southwest of Acapulco, Mexico, might well be called the Island of Nothing by the fishermen who occasionally venture that far into nowhere.

Early one morning last February, however, the Island of Nothing was all there was for 10 San Diego fishermen whose ship, the *Monarch* had capsized and sunk a mile offshore.

At first, the novelty of being stranded and the work necessary in erecting shelters kept the men fairly cheerful and busy. Hopes were high that they would be found soon. But, as the days turned into weeks, the fish, coconuts and water on which the men subsisted became more and more unappetizing.

On the 21st day, the long vigil in the sun ended as quickly as it had begun. Straining their eyes in an effort to spot anything that moved across the far-reaching horizons of water, the men sighted another fishing boat which moved in to pick up the castaways.

News of the stranded fishermen was passed to another fishing boat, which notified the Coast Guard. The Coast Guard, in turn, passed the news along to the Navy, requesting that the ship nearest the scene be dispatched to complete the rescue.

The newly commissioned guided missile destroyer USS *Robison* (DDG 12) got the nod. *Robison*, en route to Acapulco from Acajulta, San Salvador, was approximately 1000 miles from Clipperton. The new DDG, commissioned in Boston in December, had been on the last leg of a move from the Atlantic to a new home port in the still-strange Pacific.

Robison rendezvoused with the fishing boat on which the ten survivors of *Monarch* had waited patiently. The DDG took her charges to Mexico, then headed for San Diego to report for work.

Training ROK Disposaleers

Explosive Ordnance Demolition Unit One's Scuba school at Pearl Harbor has international alumni.

Four Republic of Korea Marines – 1ST LTs Kim Joon and Chang Duck and TSGTs Pyo Sang Chi and Chung Yoon Shick – were members of the school's latest graduating class. The class also included five U. S. Marines and one Navyman.

EODU One conducts four such Scuba (Self-Contained Underwater Breathing Apparatus) classes each year at the Pearl Harbor detachment headquarters of its parent organization, the Pacific Mine Force.

The ROK Marines completed courses in amphibious reconnaissance and reconnaissance company employment in California before coming to the Scuba school. At the school they were instructed in the physics and physiology of diving before commencement of the formal Scuba course.

FROM THE DEEP – ROK Marines undergoing training in Scuba school at Pearl Harbor emerge from surf after a 1500-yard submerged swim.

Raleigh Does Job of Two Ships

Raleigh (LPD 1), the first amphibious transport dock to be built for the U. S. Navy, was launched in March at N.Y. Naval Shipyard.

The LPD combines the capabilities of troop transport and cargo carrying ships. For the first time in the history of amphibious warfare, Marines will travel to the assault area on the same ship with their heavy equipment. In the past, two separate ships were required.

The LPD will also eliminate hazardous over-the-side off-loading of troops and equipment in assault areas. Landing craft, pre-loaded with troops and equipment, will be launched from a well in the LPD that opens to the sea at the rear of the ship.

A helicopter platform, built over the ship's well enables the LPD to carry and launch six helicopters.

The 521-foot-long *Raleigh* is the fourth ship of the U. S. Navy to be named for the capital city of North Carolina and the famed English explorer Sir Walter Raleigh.

Raleigh is scheduled to be commissioned in July of this year and will be manned by approximately 30 officers and 460 enlisted men.

Nose Tow for Carrier Planes

A new nose-tow method for launching carrier-based planes is being tested at NAS Patuxent River, Md.

The system was designed and built for two new aircraft, the A2F *Intruder* and the W2F *Hawkeye*. It will be used with the C-11-1 catapult designed and developed by the Naval Air Engineering Laboratory, Philadelphia, Pa.

In the catapult method now used,

flight deck crewmen must attach a heavy steel launching cable, or bridle, to hooks built into the underside of the plane. This is a difficult, sometimes dangerous, and always time-consuming job.

In the nose-tow method, a catapult hook is part of the *Hawkeye's* nose wheel installation. A steel cylinder replaces the heavy bridle, and a tow bar located in front of the *Hawkeye's* nose wheel engages the catapult automatically. The aircraft needs only to be guided onto the catapult by the flight deck crew.

When it becomes operational, the W2F-1 will be the Fleet's first catapult launched turboprop aircraft. It carries a crew of five and has a wingspan of 80 and one-half feet.

The *Intruder* is a low-level attack bomber with the ability to deliver nuclear or conventional weapons on targets completely obscured by weather or darkness.

TOURING the city of Sydney, Australia, two Navymen of *USS Coontz* (DLG 9) make friends with a local wallaby at the Taronga Park Zoo.

Frigate Gets Around

It's safe to assume that in the future it will be difficult to impress Navymen on board USS *Coontz* (DLG 9). They've already been there, or they've done it before.

For example, when they returned from their last deployment with the U. S. Seventh Fleet, they had chalked up visits to such ports as Yokosuka, Kobe and Sasebo, Japan; Hong Kong; Chinhae, Korea; Pearl Harbor, Hawaii; and Subic Bay, Philippines.

In addition, while returning to San Diego, Calif., at the end of her deployment, *Coontz* visited Perth, Albany, Melbourne and Sidney, Australia, as well as Pago Pago, American Samoa. *Coontz* had not been home since August 1961, when she left San Diego for her deployment.

Coontz, it appears, did a good job. She was awarded the "E" for excellence for accuracy with her *Terrier* missile battery while engaged in Fleet antisubmarine and anti-air warfare exercises. While firing *Terrier* missiles at high-speed jet targets, she registered kills in three successive competitive exercises.

In the seven months *Coontz* operated with the Seventh Fleet, she participated in 50 replenishments at sea, during which she received fuel, spare parts, ship-keeping supplies, food and ammunition.

Soon after the ship moored at Albany, Australia, U. S. Navymen were invited to go on a kangaroo hunt. Within five minutes, there were more volunteers than room, and soon the Navymen and their Australian hosts were off on their "roo" hunt.

One of the Navymen bagged a kangaroo and brought it back to the ship to share with the crew.

En route from Albany to Melbourne, *Coontz* was hailed by the aircraft carrier, HMAS *Melbourne*, flagship of the Royal Australian Navy Fleet, and two escorts.

Melbourne asked *Coontz* to come alongside to receive a package. The mysterious bundle, which weighed 80 pounds and was labeled, "Handle with Care," was transferred by highline to the U. S. missile ship.

SETTING-UP — *USS Coontz* (DLG 9) sailor receives some pointers from his 'Aussie' host during an informal rifle match at Sydney, Australia.

The box contained a huge cake.

After the two ships parted, the Australian carrier sent out planes so *Coontz* could demonstrate her tracking abilities to three Royal Australian Navy officers who were embarked in the U. S. ship for the trip from Albany to Melbourne.

Hospitality was not one-sided. Besides opening the ship for general visiting in every port, *Coontz* also hosted groups of visiting Royal Naval cadets (both ratings and officers), as well as orphan children from the Salvation Army Home in Melbourne. Some 60 orphan children came aboard one day for an ice cream and cookie party followed by a movie and a tour of the ship. They were fascinated by the many hatches and doors, pointing and staring wide-eyed into each one to see what was inside.

In Sydney, several of the visiting Navymen had a chance to see at close range some of the animals native to Australia. They visited Taronga Park Zoo, where the crew members were invited to hold and pet a tame koala bear and a wallaby.

As the ship moored in the port of Pago Pago, American Samoa, it was greeted by a Samoan dance group. Two U. S. Navymen, native to Samoa, who were attached to *Coontz,* quickly shifted to lava-lava (waist cloths) to greet their friends in proper Samoan attire. In their haste, however, they forgot to remove their brightly shined shoes, and stepped ashore a little out of uniform for the islanders.

STRIKE KING—W. D. King, AO1, USN, shows form used in perfect game and 750 set at Minneapolis.

From Pago Pago, *Coontz* went on to make a brief stop at Pearl Harbor, Hawaii, and then headed for San Diego.

Cable Catcher

The story of USS *Antietam* (CVS 36) could very well be titled "Safesnags—Lots of Them." Since she was commissioned in 1945, *Antietam* has recorded more than 108,000 arrested landings and compiled an impressive safety record. For example, during a recent nine-month period, 21,706 consecutive *Antietam* cable-catches were accident free.

Antietam's many safesnags are no accident. For three years running, the ship was presented the Chief of Naval Operations Naval Aviation Safety Award, which, as far as the *Antietam* flight deck crews are concerned, pretty well indicates that safety can be habit-forming.

Since 1957 *Antietam* has been assigned to the Chief of Naval Air Training, Pensacola, Fla., as a training carrier for student aviators. This makes her record all the more impressive: More than 70,000 of the planes snagged safely by *Antietam* were piloted by rookies.

TOP PERFORMERS in each phase of physical fitness program of *USS Ajax* (AR 6) strike a pose with ship's physical fitness director.

GI Home Loans

Navymen who are veterans of World War II should ask themselves whether or not they want to take advantage of home-buying benefits provided under the GI bill.

Congress has extended the eligibility of qualified veterans for these benefits until 25 July of this year. For some, there is a longer eligibility period. It can be figured by fixing the date of discharge or release from the last period of active duty which occurred during World War II. After this starting point is set add 10 years, plus an extra year for each three months of active duty which occurred during World War II.

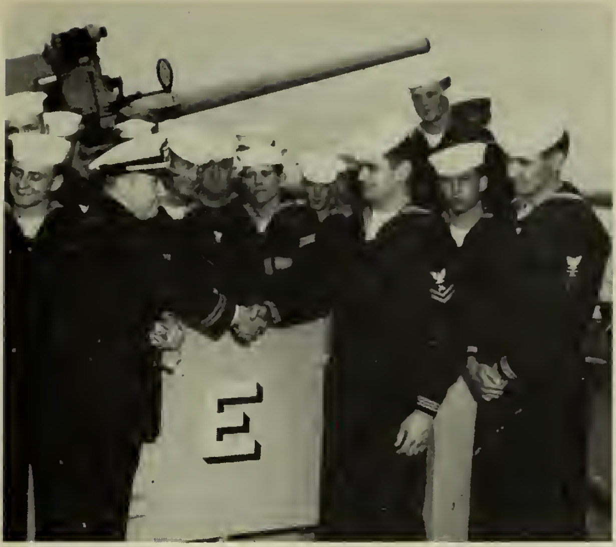
No World War II veterans will retain their eligibility after 25 Jul 1967 unless a future law provides an extension of the ultimate cutoff date.

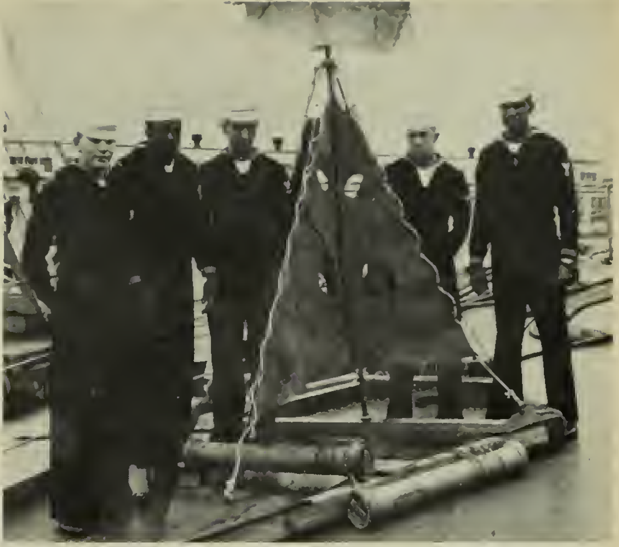
Korean-conflict veterans who were honorably discharged or separated at any time between 27 Jun 1950 and 1 Feb 1955, with at least 90 days' total service, are also entitled to loans.

Their entitlement will expire under the same formula which governs World War II veterans.

Unless they use their entitlements before 31 Jan 1965, however, eligible Korean veterans can be certain of having their benefits until that date. The ultimate cutoff date for Korean veteran home loan benefits is set for 31 Jan 1975. Both these dates are subject to future extension by Congress.

For those who want to go into





'E' WINNERS of *USS Chewaucan* are congratulated. *Rt:* Crewmen pose with target they designed and built.

details concerning these and other benefits to World War II and Korean-conflict veterans, the Veterans Administration has published a booklet entitled "Federal Benefits for Veterans and Dependents" (VA Fact Sheet IS-1) which is available upon request from your nearest VA office.

NATO Nations Get *Bullpup*

The U. S. Navy is to furnish administrative and technical support for the manufacture of its *Bullpup* air-to-surface missile in Europe for use by NATO nations under a coordinated weapons production program.

A Norwegian company has been selected to be the prime contractor in Europe. The United States prime contractor will assist the participating NATO nations in setting up production lines in Europe similar to those used in the United States.

Training will be offered to NATO personnel in management, manufacturing and technical areas and assistance in the form of special tools, test equipment and missile components will also be available to NATO.

Components will be obtained from the United States until European suppliers are able to qualify their parts to meet the design specifications of the missile.

Bullpup was developed to meet the need for a missile which could be launched from an aircraft at a safe distance from enemy ground fire and accurately guided by the pilot to the surface target. It has been operational in the Navy since 1959 and the Air Force since '60.

Tanker Posts E's for Gunnery

The gun crews of USS *Chewaucan* (AOG 50) are proud of the large white "E" painted on each of their 3/50 gun mounts.

As any Navyman knows, gun crews usually don't rate such distinction through accident. *Chewaucan's* men were no exception. These gunners were inventive.

They scrounged some scrap lumber and built a diamond-shaped frame from four-by-fours. At the center of the main crossbar, they elevated a radar reflector on a shaft about seven feet above the target. The reflector consisted of two rectangles of sheet metal interlocked at the center.

From the reflector, they rigged canvas painted red to the four points of the diamond frame. No matter how the sea tossed the target, one side was always visible through the gun sights.

Perhaps practice didn't make perfect but it paid off sufficiently to make *Chewaucan*, according to COMSERVLANT, the only Atlantic Service Force ship to win an "E" for every mount during a single exercise.

Two Submariners Credited with Saving Their Ship

Two enlisted men credited with saving the submarine USS *Charr* (SS 328) during an emergency off the coast of California last fall have been formally commended by the Secretary of the Navy.

John J. McGee, EM1, was presented the Navy Commendation Medal, and Douglass Webster, EM3, received a Letter of Commendation.

Charr was operating submerged 150 miles southwest of San Diego (her home port) when the emergency occurred last September. A rubber coupling which supplies cooling water to motors below the ship's maneuvering room broke, and thousands of gallons of sea water poured into the compartment. McGee and Webster were working in the compartment.

The sub was at a depth of more than 100 feet at the time.

Although faced with possible electrocution, the men sealed themselves inside the flooded compartment to confine the inrushing water to the single space. They did this by dogging the hatches to adjoining compartments (the forward diesel engine room and after torpedo room).

Both men continued to operate their controls — to provide power for the ship to surface.

LCDR Harold F. Skelly, *Charr's* commanding officer, ordered an emergency surface. It was then that McGee and Webster were most in danger. Water rose above their knees and threatened to short out the compartment's electrical circuits.

However, the ship, traveling at a steep up angle, reached the surface 90 seconds later and the two men emerged uninjured.

SERVICESCOPE

Brief news items about other branches of the armed services.

THE AIR FORCE will install 390 new airplane landing aids at its United States and overseas bases. They are a type of optical aid known as the visual glide slope indicator (VGSI) which allows pilots to fly approaches on a predetermined glide path while guided by flight signals from the ground.

Six sets of lights (three on each side of the runway) tell the pilot whether or not his plane is high or low on the glide path by a system of graduated red-to-white color changes in the light.

In sunlight, the system can provide accurate guidance at ranges from four to five nautical miles. At night the range is increased to seven or eight miles.

The new system was selected by the FAA's Bureau of Research after evaluating five systems over a period of two years. It has been adopted as the national standard for both civil and military airports.

The Air Force expects the system to reduce the number of accidents, 75 per cent of which were caused during the past two years by under- or over-shooting the runway.

★ ★ ★

A NEW TRANSISTORIZED walkie-talkie has been developed by the Army to replace the three sets now in use.

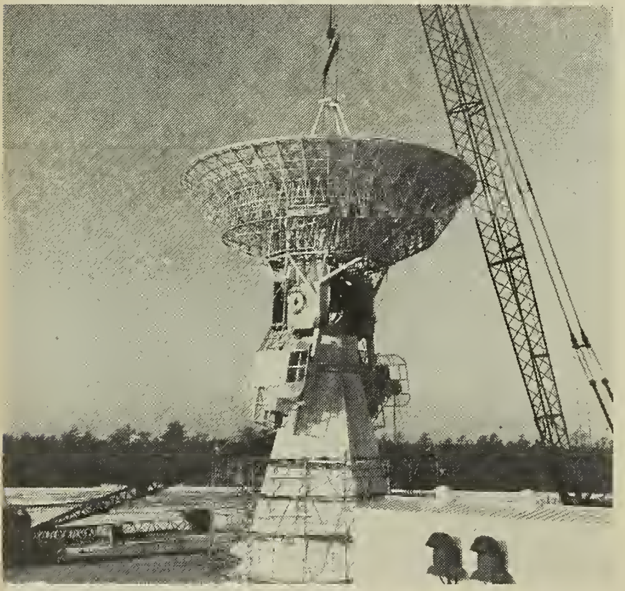
Although it is somewhat smaller in size and weighs less than its Korean conflict predecessors, the main advantage of the new set is its simplicity of operation and versatility.

The new walkie-talkie can utilize as many as 920 FM channels. It has 13 crystals controlling all channels and, unlike the older models, never needs calibration in the field.

Since the set is transistorized, having only one electron tube, it needs less power. All the transistors operate on either three or 15 volts. The 150 volts needed by the single transmitter tube are provided by a transistorized power converter.

The smaller battery load is mainly responsible for the smaller size and weight of the new walkie-talkie. The older equipment was more than half batteries.

The Army Signal Research and Development Laboratory at Fort Monmouth, New Jersey, designed and developed the new set.



SATELLITE TRACKER — Project Advent space communication antenna is erected at Fort Dix, N. J.

TO SEA TO SEE—Army's LARC-15 amphibious vehicle is water-tested near Camp Pendleton, Calif.

★ ★ ★

Experiments with the orbiting *Echo I* balloon communications satellite have resulted in the first transmission of a television picture via space. Under Air Force sponsorship, a TV signal was beamed at the satellite from the Massachusetts Institute of Technology's Lincoln Field Station in Camp Parks, Calif. The signal bounced off, to be received by MIT scientists in Bedford, Mass.

Echo I was in orbit over the U. S. at an altitude of approximately 1000 miles.

The present condition of the *Echo I*, and the problem of tracking the elusive balloon with the narrow transmission and reception beams of ground equipment, rendered the effort extremely difficult.

Echo I was launched two years ago by the National Aeronautics and Space Administration. At that time, it had a near perfect spherical shape, and produced relatively strong and steady radio reflections. The balloon has survived longer than expected, despite its continual exposure to radiation bombardment and showers of meteoric particles. The balloon is now partially deflated and its once smooth surface has become wrinkled and distorted.

★ ★ ★

AN ARMY NUCLEAR POWER PLANT at Fort Greely, Alaska, went critical (sustained a controlled chain reaction) this spring.

It is the third such Army plant to be put into operation.

The plant's capacity is 4000 kilowatts of power—2000 for heating base installations and 2000 for generating electricity. The output will be sufficient for the needs of a town of about 2000 population.

After the first period of testing, the plant will be studied in the development of further peaceful uses of the atom at remote installations.

Army Engineers are operating nuclear power plants at Fort Belvoir, Va., and at Camp Century (Greenland) on the Arctic ice cap, 800 miles from the North Pole. Fort Greely is in Alaska's sub-Arctic area.

★ ★ ★

Citizens of Denver, Colo., who took the time to drive to Lowry AFB this spring could have seen the United States' *Titan* missile join the Air Force.

Titan I is part of a generation of missiles designed to deal a quick counterblow in case of a surprise attack on the United States.

Titan is stored in an underground silo-like structure. It burns a kerosene-base fuel and liquid oxygen. In a matter of minutes it can be fueled and raised to the surface by elevator to be launched against an enemy more than 6300 statute miles away.

Titan missiles are the responsibility of the Air Force's 451st Strategic Missile Wing.

★ ★ ★

The army signal corps has worked out a system for synchronizing atomic clocks in various parts of the world and measuring their accuracy in millionths of a second. This close measure of time may be useful in tracking satellites and missiles, and global communication and radio wave studies.

For the World-Wide Synchronization of Atomic Clocks (WOSAC) project, three atomic clocks (atomichrons) were installed at the Rome, N. Y., Air Development Center. These were "master" clocks — their average tick was taken as the standard.

Another atomichron was installed in an Air Force plane and flown from New York to Chile.

A control signal from the master clock was switched, by radio link, to an experimental transmitter at the Navy Electronics Laboratory, Forestport, N. Y. Monitor equipment aboard the aircraft kept the airborne clock synchronized with the master.

Then, in Chile, another "slave" clock was set in phase with the aircraft atomichron, and the master signal kept them all running together.

ON THE DOUBLE—SAC personnel man stations during 'alert' training exercise at Carswell AFB, Tex.

PLANE RUNNERS—USAF flight crews rush to bombers during 'alert' training at Offutt AFB, Omaha.

After returning to New York, the aircraft clock was checked against the standard and then flown some 5000 miles to Hawaii, where another slave clock was synchronized. The procedure was repeated on a flight to Sydney, Australia.

★ ★ ★

Army helicopter pilots chopped up two unofficial world aviation records in the whirlybird time-to-climb category during test flights last April in a turbine-powered YHU-1D *Iroquois*. The flights—to altitudes of 3000 and 6000 meters—trimmed more than one minute off the times presently recognized as world records Both flights were logged at Fort Worth, Tex.

Lieutenant Colonel Leland F. Wilhelm, USA, piloted the *Iroquois* to 3000 meters (9843 feet) in two minutes, 14.6 seconds. The previous best time was two minutes, 44.5 seconds, clocked by an Air Force helo last October.

Captain Boyce B. Buckner, USA, checked in at 6000 meters in five minutes, 51 seconds. The presently recognized record — also established by the Air Force last October — is six minutes, 42.3 seconds.

The Army's times must be certified by the Paris-based Federation Aeronautique Internationale before they can be entered in the Aviation Record Book.

★ ★ ★

The Bendix Trophy for 1962 was awarded to the United States Air Force in recognition of the record-breaking transcontinental flight of a supersonic B-58 jet bomber piloted by Captain Robert G. Sowers on 5 March.

The record was set in a flight between Los Angeles and New York in two hours and 56.8 seconds — an average speed of 1214.71 miles per hour.

The first Bendix Trophy was awarded to Jimmy Doolittle in 1931 for his nine-hour and ten-minute flight in a Laird *Salvation* from Los Angeles to Cleveland, Ohio.

Last year's trophy was awarded to the Navy's Lieutenant Richard Gordon who made the transcontinental flight from Ontario, Calif., to Brooklyn, N. Y., in an F-4H *Phantom II* in two hours and 48 minutes.

THE BULLETIN BOARD

Navy Dependents Travel Overseas As Restrictions Are Lifted

HEADING FOR A TOUR of overseas duty? If you are, a variety of travel bans, transportation cutbacks, and overseas crises during the past several years may have you confused about whether or not your dependents will be permitted to accompany you. At present, you can relax. The bans have been lifted and authorized dependents are once again permitted to travel at government expense to most overseas installations.

By Navy definition an "authorized" dependent is one entitled by law to travel overseas at government expense upon the permanent change of station of his or her sponsor (that's you), and authorized by the appropriate military commander to be present in a dependent status for the purpose of logistical support within his command.

Joint Travel Regulations (paragraph 7000) spells out who is authorized and who is not. In general, your dependents are entitled to overseas transportation at government expense from your old station to your new command, UNLESS:

- You are in pay grade E-4 with less than four years' service, or in pay grade E-3, E-2, or E-1.
- A dependent concerned is a member of the uniformed service on active duty on the date your change of station orders become effective.
- Dependency does not exist on the effective date of your change of station orders.
- Dependents concerned receive some other type of travel allowance from the government in their own right.
- If dependent parents, they do not reside in your household (unless approved by competent authority).

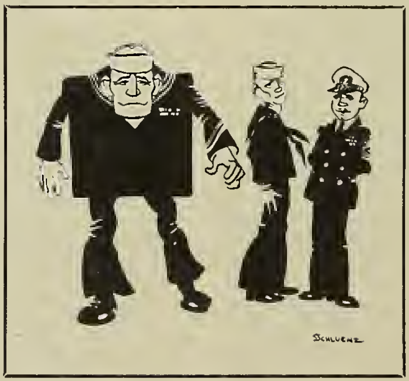
The fine print of *Joint Travel Regulations* contains a number of other clauses that could disqualify dependents from transportation at government expense, but these points do not come up too often.

The general policy on the overseas movement of Navy dependents and household effects is contained in BuPers Inst. 1300.26B, which also lists the lengths of tours in various overseas areas and indicates areas in which dependents are not allowed.

Even though your dependents may be "authorized" for transportation overseas, a number of other considerations must be met before they will actually be allowed to perform the travel. The first consideration, of course, is whether or not your dependents are allowed in the area to which you are ordered. If they are, you can start making plans. If they aren't, better plan on a period of separation from your family. (Normally, the standard tour in areas not open to dependents is one year.)

If dependents are to accompany a Navyman, before being presented with standard orders directing his transfer, he will be interviewed by a representative of his commanding officer who will try to determine his and his dependents' fitness for residence in the overseas area concerned. (Does the area have suitable medical facilities to handle any special needs of the dependents? Are the serviceman and his dependents worthy representatives of the U.S.?) If, for some reason or other, the interview produces evidence that it might not be wise to transfer a particular individual to the overseas area indicated on the initial orders, his CO will bring the matter to the attention of the Chief of Naval Personnel, via the cognizant Enlisted Personnel Distribution Office.

The Chief of Naval Personnel will weigh the facts and notify the CO to handle the problem in one of the following ways: Send the man without his dependents on a "short tour" basis; (or) send him and his dependents, whether or not physically qualified; (or) cancel the orders.



"Now there goes one of the most squared-away sailors you'll ever see."

Here's another standard transportation ruling that could block dependents' travel: Their transportation to overseas station will not be authorized unless you have sufficient obligated service to complete the standard tour for that area. If you're going to a ship or some mobile-type unit which is homeported overseas, your dependents will not be authorized travel to the home port unless you have at least one year of obligated service and can reasonably be expected to serve for one year after your dependents arrive.

In no event are your dependents moved overseas at government expense if your tour would be less than one year after their arrival.

The one year minimum also applies to situations involving changes of home ports or bases between the U. S. and overseas. Dependents are authorized transportation to overseas home ports only when there is no expectation of a change in home ports within one year after their arrival.

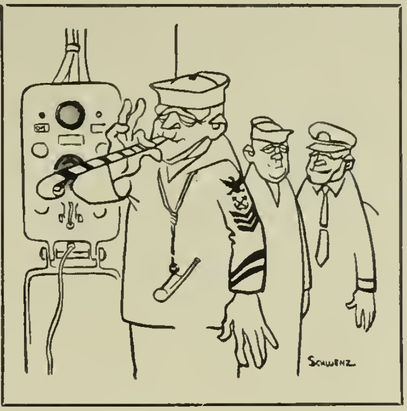
Tour minimums apply whether your dependents accompany you overseas or join you there later. If you do report without your dependents, and their movement is authorized later, your CO will, upon their arrival, adjust your tour completion date so it jibes with the "with dependents" category, computed from the date you departed the U. S.

If insufficient obligated service ever blocks your dependents' transportation, you can remedy this by reenlisting, executing an agreement to extend your enlistment, or by agreeing to remain on active duty. Here's a tip: If you agree to extend your enlistment for the primary purpose of acquiring sufficient obligated service to complete an overseas tour, it may be conditional — to become effective *only* if the entry of your dependents into the area is approved. You should make sure a notation to this effect is made in your service record. *BuPers Manual,* Article C-1407(3), shows how it's done.

Incidentally, if you have completed more than 17 years' service, before you are ordered overseas you must agree to remain on active duty for a period sufficient to complete the prescribed tour for the area concerned. If you desire transfer to the Fleet Reserve or Retired List while overseas, your request will normally not be approved until you complete the normal "with dependents" tour. (There are exceptions, such as bona fide hardship cases.)

If your dependents are "unauthorized" – that is, not eligible for transportation at government expense – you are advised not to bring them to your overseas station commercially. If you do, you'll have to pay for their return to the U. S. when your tour is completed. However, "unauthorized" dependents are furnished medical service, as provided by law, and are permitted to use Exchange and commissary facilities where available for authorized dependents.

Information pamphlets on living conditions overseas have been compiled by the Navy for most locations. A copy of the pamphlet which applies to your area is usually forwarded to you with your orders. If you don't receive a copy, you may request one from the Chief of Naval Personnel (Attn: Pers G-2), Washington 25, D. C.



"Boats was really the hit of the orphan's party last night."

Extensions of Overseas Tours Granted in Unusual Cases

If you are assigned to overseas duty you'll normally be expected to serve only the standard "with dependents" or "without dependents" tour for the area concerned. Extensions are granted only in unusual and well substantiated cases which are deemed in the best interests of the Navy.

When extensions are granted, they are for a maximum of one year. Your CO must endorse your request indicating you are psychologically and physically adapted for additional duty in his area. The Chief of Naval Personnel and appropriate Enlisted Personnel Distribution Office have the last word on whether or not your extension will be granted.

The pamphlets spell out such things as entry approval requirements, types of quarters available, and approximate waiting period for government housing.

You'll find the pamphlet titled "It's Your Move" helpful for additional information concerning your transfer overseas. This is published by the Bureau of Supplies and Accounts, and may be obtained from your Household Goods Shipping Office.

When you receive orders to overseas duty, you are encouraged to communicate with your new command well in advance of transfer date. If you let your prospective CO know about your housing requirements, approximate date of arrival, and ask questions about the things that confuse you, your transfer will go smoothly and you'll have a good idea of what furnishings you should ship and what you should place in storage. (Government furnishings are not provided to occupants of family quarters who already have their own; if the government ships your furnishings overseas you will be expected to use them.)

Machine Accountant Training At Bainbridge, Maryland

The new addition to the family of training schools at Bainbridge does not include an established Class A school. In our April issue (Bulletin Board, page 50) the article, "Machine Accountant School Opens at Bainbridge," described three types of machine accountant training, referring to the second type as "the Class A" school. The article appropriately describes the types and levels of training, but has been misinterpreted as to school establishment. Class A schools are officially established by administrative action of the Chief of Naval Personnel.

The machine accountant courses operating at Bainbridge meet some of the needs for operational training. It should be noted that similar courses have been set up at other PAMIs. Assignment of machine accountant personnel for training is under EPDOCONUS. No BuPers quotas have been established for this training, and requests for MA training should be addressed to Commanding Officer, EPDOCONUS.

If You're Headed Overseas Better Know These Terms

Here's a spelled out version of some common change-of-duty expressions with which you'll become familiar if you're ordered overseas.

Permanent Change of Station – Your transfer or assignment from one permanent station to another. Includes change in your ship's home yard or home port.

Overseas Duty – Duty at a military installation or activity permanently located at a land station outside the U. S. (Alaska and Hawaii are considered to be outside the continental limits of the U. S.; are therefore overseas duty spots.)

Standard Tour – The established period of duty at a specific location.

Authorized Dependent – Dependent authorized to travel overseas at government expense upon your permanent change of station, and authorized by the appropriate military commander to be present in a dependent status.

Unauthorized Dependent – Dependent not authorized to travel at government expense, or dependent who is authorized government-expense travel who is present in an overseas area without military authorization.

Report on the Length of Tours at Naval Activities Overseas

Where in the world would you like to be stationed? Here's a roundup of standard overseas tour lengths. Generally, the time creditable on your overseas tour begins on the day you depart the U. S. and terminates the day you return upon permanent change of station. The length of overseas tours is subject to change.

Locations indicated by asterisks are areas where dependents are not permitted.

These tour lengths do not apply to Attache personnel (BuPers Inst. 1300.26B has a complete list).

Country or Area	Tour With Dependents (In months)	Tour Without Dependents (In months)
AFRICA AND MIDDLE EAST AREA		
Bahrein Island	15	12
Egypt	36	24
Ethiopia (except Eritrea)	24	18
Eritrea (Asmara)	30	18
Iran (except Teheran)	24	12
Teheran	24	18
Iraq	24	18
Liberia	24	18
Libya (except Tripoli)	30	18
Tripoli	36	18
Morocco		
Ben Guerir Area	24	12
Casablanca Area including Nouasseur	36	24
Marrakech Area	30	18
Port Lyautey Area including Boul Haut, Rabat and Rabat Sale	30	18
Sidi Slimane	24	12
Pakistan (except Peshawar and Lahore)	24	18
Peshawar	24	15
Lahore	*	15
Republic of Congo	*	12
Saudi Arabia (except Dhahran)	18	12
Dhahran	24	13
Turkey		
Ankara, Istanbul, and Izmir	30	18
Adana, Sile, Golcuk, and Karamursel	24	18
Derence, Iskenderum	*	18
Trabzon, Samsun, and Diyarbakir	*	15
Other areas	*	12
Palestine, UN Truce Supervisory Organization	24	18
EUROPE		
Austria	36	24
Belgium	36	24
Crete	24	18
Corsica	*	18
Cyprus	24	18
Denmark	36	24
France	36	24
Germany	36	24
Greece	30	18
Italy	36	24
Malta	24	12
Netherlands	36	24
Norway	36	24
Portugal	36	24
Sicily, Sigonella	24	18
Spain (except El Ferrol and Cartagena)	36	24
El Ferrol and Cartagena	24	18
United Kingdom (except Londonderry)	36	24
Londonderry	24	18
Yugoslavia	24	18
FAR EAST AND PACIFIC AREA		
Australia (except Alice Springs)	36	24
Alice Springs	24	18
Burma (except Rangoon)	24	12
Rangoon	24	14
Cambodia	24	12
Chichi Jima	18	12
Eniwetok	*	12
Guam	24	18
Hawaii	36	24
Hong Kong	36	24
Indonesia	24	14
Iwo Jima	*	12
Johnston Island	*	12
Japan	36	24
Korea	24	13
Kwajalein	18	12
Laos	24	12
Midway Islands	18	12
New Zealand	36	24
Republic of the Philippines (exept below)	24	18
Balanda area, Bataan	*	12
Mindanao	*	12
Wallace Air Station, Luzon	*	15
Ryukyus Islands	30	18
Saipan	24	18
San Nicolas Island	*	12
Taiwan	24	15
Thailand (except Bangkok)	*	12
Bangkok	24	18
Vietnam	30	18
Wake Island	18	12
NORTH AMERICA AND NORTH ATLANTIC		
Alaska		
Aleutian Peninsula and islands West of 162nd Meridian including Adak, Attu, and Dutch Harbor	18	12
Anchorage area including Elmendorf AFB and Fort Richardson	36	24
Big Delta area including Fort Greely	24	18
Fairbanks area including Eielson AFB and Ladd AFB	30	18
Juneau area	24	18
Kenai-Whittier area including Wildwood Sta.	24	18
Fire Island	*	12
Kodiak Island	24	12
Murphy Dome	*	12
Nome area	24	12
Point Barrow area	18	12
Azores	24	12
Canada		
Labrador (except Goose AFB)	24	12
Goose AFB	24	15
Metropolitan areas	36	24
Newfoundland		
Argentia	24	18
St. Johns	36	24
Stephenville	30	18
Other areas	24	12
Greenland	24	12
Iceland	24	12
Mexico	36	24
SOUTH AMERICA AND CARIBBEAN AREA		
Antigua	24	18
Anguilla	24	18
Argentina	36	24
Aruba	24	18
Barbados	24	18
Bermuda	36	24
Bolivia	24	18
Brazil (except below)	36	24
Fortaleza	*	18
Recife	24	18
Salvador	24	18
Santa Cruz	24	18
Chile	36	24
Colombia	36	24
Costa Rica	36	24
Cuba		
Guantanamo	24	18
Dominican Republic	36	24
Ecuador	24	18
Eleuthera	24	18
El Salvador	36	24
Guatemala	36	24
Haiti	36	24
Honduras	24	18
Nicaragua	24	18
Panama including Canal Zone	36	24
Paraguay	24	18
Peru	36	24
Puerto Rico	36	24
San Salvador Island	*	12
St. Lucia	*	12
Trinidad	24	18
Turks Islands	*	12
Uruguay	36	24
Venezuela	36	24

Navymen Are Encouraged To Take Leave They Have Stored Up on the Books

All work and no play can make Sam Sailor a dull boy — and Jack Sailor, Jim Sailor and Murgatroyd Sailor, too. To keep from getting into that shape yourself, the Navy wants you to start taking some of that leave you've got stored up on the books.

SecNav has become concerned enough about the accumulated leave situation to issue an official Notice — No. 1050 of 17 April — on the subject. In it, he emphasizes once again something most of us already know — that while it's nice to be paid for 60 days' unused leave upon separation and/or reenlistment, that was not, and is not, the major intent of the Armed Forces Leave Act of 1946.

That Act provided leave for military personnel at the rate of two and one-half days for each month of active service. It further provided that "leave shall be taken annually as accruing to the extent consistent with military requirements and other exigencies." In order not to penalize those who, for one reason or another, could not be spared from their jobs to take their leave as it accrued, Congress also stipulated that members of the armed forces could accumulate up to 60 days of unused leave and be paid for it upon termination of service.

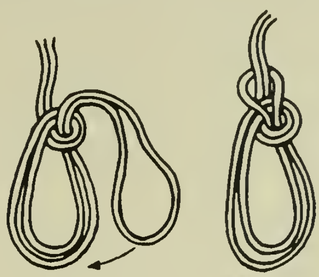
Despite this clear Congressional intent, the personal need for leave, and numerous directives which have been circulated since 1946, the annual increase in funds required to support payment of terminal leave indicates that far too many Navymen are piling up leave in amounts in excess of that dictated by military necessity.

Furthermore, SecNav wants commands to start doing something about it. While emphasizing that the taking of leave is not mandatory, he points out that it must be vigorously encouraged, new programs established where needed, and former programs revitalized and forcefully administered.

Such programs could include: A review of directives on the subject of leave, and revision of such directives where warranted; continuing information programs to impress Navymen with the necessity for taking leave; timely detachment of persons on permanent-change-of-station orders to enable them to take all of the leave authorized in their orders; encouragement of several short periods of leave where a long period is not possible; preparation of leave schedules, possibly as frequently as quarterly, for command review and encouragement of leave taking; and a review by each command of its administrative procedures, to insure complete accuracy in accounting for leave taken.

Next time you get a chance, then, hop on home and see Mom and Pop for a while. Or, if you're a married man, pack up your wife and kids and take a trip. You'll be helping the Navy and yourself — and you'll no doubt find that you'll look sharper, feel sharper and be sharper when you get back to work.

Grains of Salt —



TYING A BOWLINE ON A BIGHT

WAY BACK WHEN

Commission Pennant

Far about as long as there have been U. S. Navy ships, there have been commissian pennants flying aver them. Until 1933, these pennants varied in length fram faur ta 70 feet. The larger ones had 13 stars and the smaller ones, seven stars. Taday they are a standard four feet lang for small ships and six feet far larger ships. They all have seven stars.

Over the years there has been considerable discussion as to the significance af the stars. So far as we have been able ta find out, there is no special significance. A standard seven-star pennant was adopted in 1933, and the use af seven stars, rather than a greater ar smaller number, was decided on because it pravided the most desirable display.

There has been equally as much speculatian abaut the arigin af the commissian pennant itself. It was thought, at ane time, that the idea dated back ta the 17th century. A Dutch admiral, so the stary goes, hoisted a broam ta his masthead ta indicate he would sweep the English fram the sea.

The English admiral, in turn, haisted a harsewhip, indicating his intention to chastise the Dutch — which he did. Fram this, some thaught, came the narraw commissian pennant, symbalizing the original harsewhip.

In recent years, same naval historians have adopted the theary that the commission pennant, alang with several ather similar pennants, evalved fram a small flag or pennon that showed a knight's rank.

In those days, a knight carried a small, painted flag. This flag ar pennan was altered somewhat ta signify differences in rank. A squire (next rank belaw knight), far example, flew a lang pennant similar ta the modern coachwhip type, while a banneret, wha was seniar ta a knight, carried a knight's pennant with a slit cut in the end.

A king or general cauld, and very often did, give a battlefield pramation ta a knight by simply cutting aff part af the fly af a pennon to create a square flag.

Fram these beginnings, say some historians, have came the modern commission pennant, braad command pennant, command pennant and similar pennants used aboard Navy ships.

Taday's commission pennant is flawn at the main of all U. S. Navy ships in commissian except when, on the flagship, its place is taken by the cammadare's ar admiral's persanal flag. A commission pennant has seven white stars in a blue field, and has two horizantal red and white stripes an the fly.

Navy Home Offers a Residence Among Friends to Oldtimers

It's always summer time and the living is easy. The words from Gershwin's *Porgy and Bess* could well be applied to life at the U. S. Naval Home at Philadelphia, Pa. That's as it should be, because it is a residence for aged or disabled Navymen and Marines.

The residents' average age is around 64. Most have had wartime service in the Navy or Marine Corps, and many of them wear the Purple Heart. The oldest resident, a Marine, is 104.

The home is a naval station and, as such, is commanded by a line officer (usually of flag rank) who is known by the title of Governor. It is located on park-like grounds; its buildings have the appearance of a bygone era, with wide verandas that lend an air of space.

The station is not a hospital to which the sick come to be cured, nor is it a place of detention. It is precisely what the name implies, a home for retired Navymen and Marines.

The purpose of the Naval Home is to provide a retirement residence for those who choose it and who are accepted by it.

When a man has his application for residence accepted, he is welcome to stay for the rest of his life if he so desires. If he changes his plans, he can depart whenever he chooses.

He can leave the home at any hour except between midnight and six o'clock in the morning. There are no restrictions concerning his return, except that he must be in his room at 0600 unless he receives permission to be absent.

If he wishes to leave for several days, he is free to do so for the asking. A man can be away from the home for a year without jeopardizing his residence there. With special permission, even a year's absence can be stretched.

The residents of the home are a living bridge which covers a great deal of naval history. Many are retired chiefs; some are retired officers. Between them, they have seen almost every port of the world and done about all there is to do.

One was serving in a United States Navy ship during the Russo-Japanese War and saw Russian warships limp into Manila harbor after the Battle of Tsushima. It was an era when the Czar's navy was seething with revolt and order was maintained in the Russian ships at the point of a bayonet.

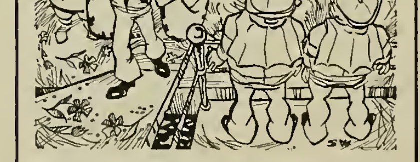
Other residents have seen the days of United States expeditionary forces in trouble spots all over the world. Some have had duty in the Philippines when warfare was more hell-for-leather than pushbutton. Some were in China before World War I, during the struggle between Republican and Monarchist forces.

Another, as a youth, was sailing between the Orient and the United States when he met a retired Navy captain who was returning from his last tour of duty in the Far East. The oldtimer talked him into joining the Navy. He remained for more than three decades.

Many remember with nostalgia their best duty stations. Hawaii in the '20s was a favorite. Others remember reviews by foreign heads of state and United States presidents who are only figures in history books to most Navymen today.

A few were born outside the United States and reached these shores through indirect routes. One, a native of Ireland, went to sea when he was a boy and made several stormy trips around Cape Horn in sailing ships. Once he left Ireland he didn't return until after his retirement. Since he has been living at the Naval Home he has made the trip back to Ireland twice.

What is life like for the men at the home? It is relaxed but far from stagnant. Many of the men have jobs on the premises, for which they receive compensation. The hours are short and the duties are light. The compensation is small but, then, so are the uses for money.



"Jenkins sure is a whiz at these people-to-people cruises isn't he?"

One man works in the greenhouse, others stand watch at the gate, some work on the grounds. During their free time, they use the recreational facilities at the home.

At the end of each wing there is a recreation room equipped with billiard tables, checkerboards and other equipment for not-too-strenuous forms of relaxation. There is also a black and white TV set. Although their bedrooms are scarcely large enough to accommodate more than a bed and a chest, some of the men have personal TV sets in their rooms.

A color set is in the assembly hall for anyone who has a yen to see his favorite program in that medium. A small theater in one of the buildings shows the same movies that active duty Navymen see at sea.

There is a club room which has the friendly atmosphere of a neighborhood tavern. Here the men can gather and have a frosty brew while they watch the ball game on the TV at the end of the room.

There is a hobby shop, equipped with machine tools and material, with which they can make everything they and the machines are capable of making. Some men have built complete sets of furniture for their rooms with the facilities provided by this shop.

There is a section of the shop, now idle, which was once used for the repair of toys collected for Christmas distribution to Philadelphia's poor.

With the advent of plastic toys, however, this shop fell into disuse. As one man put it, with obvious disdain, "when a plastic toy has had it, it's had it good."

The favorite outdoor sport is pitching horseshoes. If a man wants to sit and read, there is a well-stocked library for that, too.

The dining room is in the main building. Flowers are on the tables when the greenhouse can provide them, or when they are in bloom on the grounds. Waitresses serve the tables at all meals.

When a man is in need of a haircut, there is a barber on the premises. If he isn't feeling well, he goes to the infirmary. If his complaint is minor, he is treated there.

The infirmary has facilities for keeping a patient for observation overnight, if necessary. He is then released or sent to the hospital in the home.

If his illness is too serious to be treated at the resident hospital facilities he is sent to the naval hospital.

Most of the men have incomes of some kind – either retirement pay, Social Security payments or pensions. For the few without such income the home provides pocket money to buy essential "small stores" during the month.

Requirements for money are few in these Navy-blue Elysian Fields. Residents are provided with uniform clothing: a hard hat without device, navy blue jacket and trousers, black shoes and sox. An overcoat, raincoat and appropriate summer uniform are also issued.

The uniform is not seen frequently around the home, except for special occasions. Most men prefer and wear civilian street clothing.

Each man receives a carton of cigarettes a month. Except for toilet articles and such, there are very few items on his budget until he steps out of the gate. There is a bus at the door which, for 23 cents, will carry him to downtown Philadelphia. When he gets there, he and his pocketbook are on their own.

The home is rich in history. The idea was conceived by Paul Hamilton of South Carolina who became Secretary of the Navy in 1809, during the Madison administration.

Secretary Hamilton recommended the establishment of a home in 1810, and it was authorized by Congress the following year.

In 1826, the present site of the home was purchased for $16,000. It was known as the Abbot tract. The Pembertons, a prominent Philadelphia family, occupied the land and lived in a fine country house which pre-dated the Revolution. The tract was once owned by the Penn family.

The building now known as Biddle Hall was planned by William Strickland of Philadelphia during the administration of John Quincy Adams. The cornerstone was laid in 1827, and the building was completed in 1833.

After completion, two pensioners and 15 patients were moved from the Pemberton mansion into the new building which was then divided, the south wing being used for hospital purposes and the north wing for domiciliary care.

In 1839, James K. Pauling, Van Buren's Secretary of the Navy, ordered 11 young naval officers to report there for training, thus establishing the school that later became

Entrance Requirements for U. S. Naval Home

Active duty Navymen may give only a passing thought to the fact that there is a Naval Home in Philadelphia, founded to provide a residence for U. S. Navy and Marine Corps personnel (and U. S. Coast Guardsmen who served while the Coast Guard was part of the Navy).

As long as a man remains on active duty, he may have no reason to give it more than a passing thought so far as he is personally concerned. For future reference, however, here is a rundown, for him and for you, on application requirements and procedures:

Applicants must be honorably discharged from one of the above services and have served either in the Spanish-American War, Philippine Insurrection, World War I or II, or in any service where United States armed forces were employed and men's lives hazarded in military operations.

They must also be unable to support themselves by manual labor because of wounds, sickness, old age or other disability.

Men receiving retired pay are eligible if their physical condition requires constant attention which would be unavailable to them elsewhere.

Men who have served in qualifying services, who have had no wartime duty but have a service-connected disability, are also admitted.

Applicants for entrance must produce evidence of their total qualifying service and state their age, birthplace, physical condition and the names of vessels and shore stations on which they served, with the names of their commanding officers and dates of service.

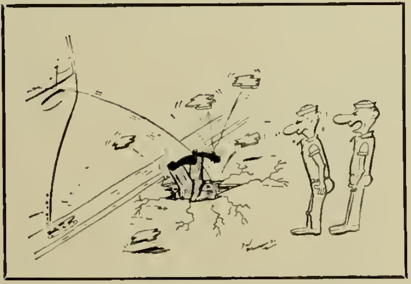
They must state the amount of their income and the relationships of their legal dependents, if any.

Applicants must also produce a certificate from a naval medical officer, or a sworn statement from a reputable civilian physician, setting forth the nature of their disability and the fact they are unable to support themselves by manual labor.

Information on the Naval Home and current entrance requirements can be obtained upon request from the Bureau of Naval Personnel, Washington 25, D. C.

Applications for the home must be submitted in duplicate and addressed to the Governor, United States Naval Home, Philadelphia 46, Pa. Blank application forms may be obtained from the Governor or the Chief of Naval Personnel.

All-Navy Cartoon Contest — 1961
Peter A. Hansen, EN2, USN



"For my money, they use too darned much weight in those monkey fists!"

All-Navy Cartoon Contest — 1961
Peter A. Hansen, EN2, USN

the Naval Academy. The academy occupied the first floor of the north wing until the midshipmen moved to Annapolis in 1845.

During the Civil War the hospital facilities of the home were overtaxed, and in 1865 work was started on the building now known as Laning Hall. The building served as a naval hospital until 1921, when the hospital was moved to the Navy Yard on League Island.

The building then became a veterans hospital until 1933, when it was returned to the Navy and renovated. During World War II, it was used as a convalescent home for Navy veterans.

During its history the home has been administered by 52 governors, from Commodore James Biddle, who served from 1838 to 1842, to Admiral Donald B. Duncan, USN (Ret.), who served from 1957 until this year.

Admiral Duncan was succeeded by the 53rd governor, Admiral James L. Holloway, Jr., USN (Ret.), the former Chief of Naval Personnel.

Right now, there are under 250 men living at the home. There are rooms for only a limited number of additional residents. Most of the men now living there have served in the Marine Corps or the Navy during wartime, and many of them have been wounded so doing.

When a man comes to the home, he must be capable of caring for himself and his quarters, and be ambulatory. While he lives there, age will creep up on him, and he may not be able to continue to fulfill these requirements. He will not be expelled because of that.

The home will not accept a man who has been discharged for misconduct from any other home or veterans' installation, nor will it accept mental cases or alcoholics.

Each year the men at the home give a Christmas party for several hundred orphans selected by the Salvation Army. The children are taken to a local department store and measured for complete outfits of clothes from shoes to hat.

By the time the party rolls around the clothes are ready, and are given to the children by Santa Claus. There are carols and games, candy and plum pudding.

The party is financed largely through bequests of deceased residents of the home. When the men enter, they are required to make a will. Frequently, they leave their worldly goods for this and other charitable purposes.

When eventually dawns that day which is their last (unless they or their families have specified otherwise) they are laid to rest with military honors at Mount Moriah Cemetery in Philadelphia, in a section which is operated as a National Cemetery.

This is the way it has been for more than a hundred years in this green island sheltered from the world's storms. Here a sailor can hang up his hat and spend the rest of his life in the company of his contemporaries and enjoy a freedom of movement and an absence of harassment which few in this workaday world are able to enjoy.

Openings for Junior Officers In *Polaris* Submarines

Polaris submarines carrying Fleet ballistic missiles and other nuclear submarines will be entering the Fleet in increasing numbers during the next few years.

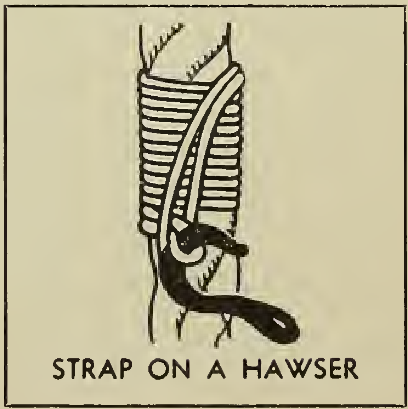
To fill the officer requirements for the *Polaris*-armed and attack submarine programs, the Navy needs a large number of outstanding unrestricted line officers in ranks of lieutenant or below.

Officers entering these programs will receive special training and the experience they acquire can place them in line for eventual command of a nuclear submarine.

Interested officers should review BuPers Inst. 1301.28A to ascertain whether or not they meet requirements.

The qualifications given in this instruction have been modified to remove the need for previous submarine experience for lieutenants and below.

Grains of Salt —



STRAP ON A HAWSER

List of New and Re-Issued Motion Pictures Available to Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Guns of the Black Witch (1943) (C) (WS): Melodrama; Don Magowan, Silvana Pampanini.

A View from the Bridge (1944): Drama; Jean Sovel, Raymond Pellegrin.

Six Black Horses (1945) (C): Western; Audie Murphy, Dan Duryea.

The Magic Sword (1946) (C): Melodrama; Basil Rathbone, Estelle Winwood.

Winning Team (1947): Drama; Doris Day, Ronald Reagan. (Re-Issue).

The Big Tree (1948): Western; Kirk Douglas, Eve Miller. (Re-Issue).

Trouble Along the Way (1949): Comedy; John Wayne, Donna Reed. (Re-Issue).

Raton Pass (1950): Western; Dennis Morgan, Patricia Neal. (Re-Issue).

Mara Maru (1951): Drama; Errol Flynn, Ruth Roman. (Re-Issue).

The Charge at Feather River (1952): Western; Guy Madison, Frank Lovejoy. (Re-Issue).

Springfield Rifle (1953): Western; Gary Cooper, Phyllis Thaxter. (Re-Issue).

Along the Great Divide (1954): Western; Kirk Douglas, Virginia Mayo. (Re-Issue).

Angel and the Badman (1955): Western; John Wayne.

The Red Pony (1956): Drama; Myrna Loy, Robert Mitchum. (Re-Issue).

I Confess (1957): Mystery Drama; Montgomery Clift, Anne Baxter. (Re-Issue).

Lullaby of Broadway (1958):

Mystery; Doris Day, Gene Nelson. (Re-Issue).

Fort Worth (1959): Western; Randolph Scott, David Brian. (Re-Issue).

Calamity Jane (1960): Comedy; Doris Day, Howard Keel. (Re-Issue).

About Face (1961): Comedy; William Tracy, Joe Sawyer. (Re-Issue).

The Day the Earth Caught Fire (1962): (WS): Melodrama; Janet Munro, Leo McKern.

The Bashful Elephant (1963): Comedy-Drama; Molly Mack, Helmut Schmid.

Malaga (1964): Melodrama; Trevor Howard, Dorothy Dandridge.

The Errand Boy (1965): Comedy; Jerry Lewis, Brian Donlevy.

Come Fill the Cup (1966): Drama; James Cagney, Phyllis Thaxter. (Re-Issue).

Dallas (1967): Western; Gary Cooper, Ruth Roman. (Re-Issue).

She's Working Her Way Through College (1968): Musical Comedy; Viriginia Mayo, Gene Nelson. (Re-Issue).

Crimson Pirates (1969): Adventure; Burt Lancaster, Eva Bartok. (Re-Issue).

Bright Leaf (1970): Drama; Gary Cooper, Lauren Bacall. (Re-Issue).

Strangers on a Train (1971): Mystery Drama; Farley Granger, Ruth Roman. (Re-Issue).

The Easy Way (1972): Drama; Ray Milland, Phyllis Thaxter. (Re-Issue).

Big Jim McLain (1973): Melodrama; John Wayne, Nancy Olsen. (Re-Issue).

Journey to the Seventh Planet (1974) (C): Science Fiction; John Agar, Greta Thyssen.

Beyond All Limits (1975) (C): Melodrama; Jack Palance, Maria Felix.

The Couch (1976): Melodrama; Grant Williams, Shirley Knight.

World in My Pocket (1977): Melodrama; Rod Steiger; Nadja Tiller.

Flight of the Lost Balloon (1978) (C) (WS): Drama; Mala Powers, Marshall Thompson.

House of Women (1979): Melodrama; Shirley Knight, Andrew Duggan.

Incident in an Alley (1980): Drama; Chris Warfield.

Babes in Toyland (1981) (C): Novelty; Ray Bolger, Tommy Sands.

The Flame and the Arrow (1982): Adventure Drama; Burt Lancaster, Virginia Mayo. (Re-Issue).

Rocky Mountain (1983): Western Drama; Errol Flynn, Patrice Wymore. (Re-Issue).

The Master of Ballantrae (1984): Adventure Drama; Errol Flynn, Anthony Steel. (Re-Issue).

On Moonlight Bay (1985): Musical; Doris Day, Gordon MacRae. (Re-Issue).

Sergeants Three (1986) (C) (WS): Adventure Drama; Peter Lawford, Joey Bishop.

Follow That Dream (1987) (C) (WS): Comedy; Elvis Presley.

The Clown and the Kid (1988): Melodrama; John Lupton, Mike McGreevey.

Samar (1989) (C): Drama; Gilbert Roland, Joan O'Brien.

Savings Bonds May Be Stored In Safekeeping Depository

If you're a frugal-minded Navyman who stashes away part of your pay in the form of U. S. Savings Bonds, here's a tip from the U. S. Navy Finance Center: You may, if you wish, eliminate the necessity of finding a safe place to stow your bonds, by authorizing the Center to retain them automatically in its Safekeeping Depository. Bonds you have stored at home may also be sent there for safekeeping.

To obtain this service, simply write a letter to the Allotment Department, U. S. Navy Finance Center, Cleveland 14, Ohio, and request that your bonds be retained in the depository. If you wish to deposit bonds you already have, prepare two copies of listing which shows your bond numbers, issue dates and denominations, along with your name, service number, and mailing address, and mail the bonds and one copy of the the list to the Finance Center. The Finance Center will acknowledge receipt of the bonds and return the copy of the listing to you.

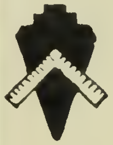
If you are not now saving under the bond-by-allotment plan, you may do so, if you wish, by visiting your disbursing office. When you prepare the Allotment Authorization (NavCompt Form 545), if you check the "Safekeeping" box on the form the Center will keep your bonds safe.

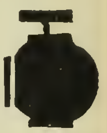
QUIZ AWEIGH

SEABEE RATES

This year is the 20th anniversary of a well-known group of Navymen. Are you familiar with the ratings in this group?

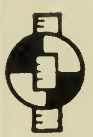
1. The rating insigne shown below and left is: (a) plumber, (b) engineering aid, or (c) builder.

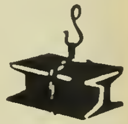




2. Above and to the right is another rating in this same group. It belongs to a man who is: (a) a plumber (b) a utilities man, or (c) a diver.

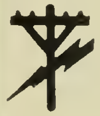
3. This is a fairly new rating. A man who wears the rating insigne shown below at left is: (a) an engineering aid, (b) a builder, or (c) a construction electrician.

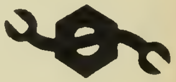




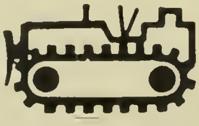
4. Men who wear the rating badge shown at right above have a heavy job to do. They are: (a) builders, (b) steelworkers, or (c) tradesmen.

5. The fellows who wear the rating insigne shown at left below must be a little careful or they may blow their tops while working. They are: (a) communication technicians, (b) engineering aids, or (c) construction electricians.





6. Hard work is not anything new to men who wear the insigne shown above and to the right. They are (a) construction mechanics, (b) equipment operators, or (c) machinist's mates.



7. There is only one other rating in the group. It is: (a) equipment operator, (b) engineman, or (c) machinery repairman.

CORRECT ANSWERS MAY BE FOUND ON PAGE 56.

Get Out Those Prize Pictures For Annual All-Navy and Inter-Service Photo Contests

If you're a camera enthusiast, take the positive, not the negative approach. Now is the time to check your best photos and give yourself an opportunity to prove how really good you are. Both the 1962 All-Navy Photography Contest and the Tenth Inter-Service Photography Contest (which the Navy will host this year) are no more than an *f*-stop or two away.

BuPers Notice 1700 of 30 April contains the rules and regulations for this year's contest. It points out that the All-Navy Contest will be conducted during October 1962 at the Bureau of Naval Personnel. It further reveals that preliminary contests may be staged on district/Fleet levels as respective naval district commandants and Fleet commanders desire; however, all entries submitted must be forwarded to the Chief of Naval Personnel (Attn: Pers-G111) for entry in the All-Navy Contest. All entries must be mailed in time to be received by the Chief of Naval Personnel by 1 Oct 1962.

Winning entries and other selected photographs will be retained by the Chief of Naval Personnel for entry in the Inter-Service Contest, to be held in early December 1962.

If you plan to enter the All-Navy Contest, here are some pointers.

Medal of Honor Men Serving on Active Duty

Of 729 Navymen who have been awarded our highest decoration — the Navy Medal of Honor—only 62 are known to be living. Nine of the 62 are still on active duty — eight as Navymen, and one as an Army officer. These nine men are:

- **RADM Lawson P. Ramage, USN — Admiral Ramage, 53, is the Assistant Chief of Naval Operations for Fleet Operations and Readiness in Washington, D. C. As commanding officer of the submarine USS *Parche* (SS 384) during WW II, Admiral (then Commander) Ramage directed his ship through the screen of a heavily escorted enemy convoy in the Pacific and launched a pre-dawn surface torpedo attack. During 46 minutes of violent action, *Parche* sank three ships and severely damaged two others. Commander Ramage, who directed much of the action alone on the bridge, brought his sub back undamaged.**

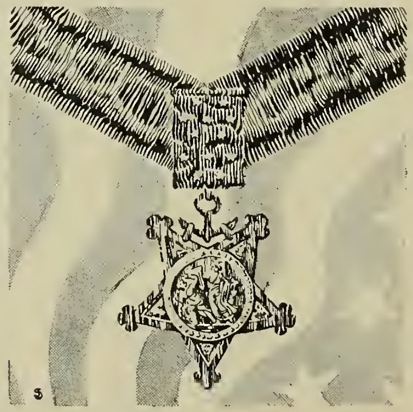
- **RADM Eugene B. Fluckey, USN — Admiral Fluckey, 48, is President of the Navy Board of Inspection and Survey, Washington, D. C. During one WW II patrol along the east coast of China, Admiral (then Commander) Fluckey, the commanding officer of USS *Barb* (SS 220) boldly initiated numerous attacks on enemy ships, sinking at least three and causing inestimable damage to others.**

- **CAPT John D. Bulkeley, USN — Captain Bulkeley, 50, is the Commanding Officer, Naval Administrative Unit, Clarksville Base, Tenn. Early in WW II, as a lieutenant commander, he commanded a motor torpedo boat squadron in Philippine waters. For more than four months without benefit of repairs, overhaul or maintenance facilities, the squadron damaged or destroyed many enemy planes and ships and dispersed landing parties and land-based enemy forces.**

- **CAPT George L. Street, III, USN — Captain Street, 48, commands Submarine Squadron 5, which is homeported in San Diego, Calif. In April 1945, the then Lieutenant Commander Street took his submarine, USS *Tirante* (SS 420), on a reconnaissance mission into the harbor of Quelpart Island, an enemy stronghold off the coast of Korea. The sub was detected but escaped safely through the heavily patrolled and mined harbor, sinking an ammunition ship and two frigates on the way out.**

- **CAPT David McCampbell, USN — Captain McCampbell, 52, serves with the Joint Staff and Joint Chiefs of Staff in Washington, D. C. An aviator, he had command of Air Group 15 during the first and second battles of the Philippine Sea. During one battle, the captain (then a commander) led his fighters against a force of 80 enemy aircraft, personally destroying seven. During another engagement, Commander McCampbell, assisted by only one other plane, intercepted and attacked a formation of 60 enemy planes which were headed for U. S. forces. Fighting desperately, the commander knocked down nine aircraft and so disorganized the rest the enemy was forced to abandon the mission.**

- **CDR Richard M. McCool, Jr., USN — Commander McCool, 40, serves on the staff of Commander First Fleet. As a lieutenant in command of an LSC during operations in the Ryukyus in June 1945, Commander McCool was assisting in the evacuation of men from a sinking destroyer when his own ship was attacked by two kamikaze planes. The LSC shot down one and damaged the other, but one of the suicide planes crashed into the ship's conning tower. Lieutenant McCool, although seriously wounded, rallied his men and continued the operation.**



- **LCDR Thomas J. Hudner, Jr., USN — Lieutenant Commander Hudner, 37, is assigned to the Bureau of Naval Weapons, Washington, D. C. In December 1950 the then Lieutenant (JG) Hudner, a fighter pilot, attempted to rescue a squadron mate whose plane was forced down by antiaircraft fire behind enemy lines in Korea. Although enemy troops surrounded the area, the pilot landed his own plane and struggled to pull his friend from the flaming wreckage. Unsuccessful in this, he radioed for help and was rescued by a helicopter rescue team.**

- **William R. Charette, HMCA, USN — Chief Charette, 30, serves in the Atlantic on board USS *Triton* (SSN 586). In Korea in March 1953, Charette, then an HM3 attached to a Marine rifle company, repeatedly and unhesitatingly moved through a murderous barrage of hostile small arms and mortar fire to render assistance to wounded comrades. When an enemy grenade landed within a few feet of a Marine he was attending, Charette immediately threw himself upon the stricken man and absorbed the entire concussion of the missile with his own body. Although Charette sustained painful facial wounds and was in a state of shock, he gallantly continued to administer medical aid to the wounded of his own unit and to those in adjacent areas as well. Observing a seriously wounded Marine whose armored vest had been torn away by an exploded shell, Charette removed his own battle vest and placed it upon the helpless man — fully aware of the added jeopardy to himself.**

- **1ST LT George E. Wahlen, USA — Lieutenant Wahlen, 37, is a former Navy pharmacist's mate. He is now assigned to the 487th Medical Company, 2nd Army Missile Command, Fort Carson, Colo. While serving with a Marine battalion on Iwo Jima in March 1945, Wahlen advanced forward of the front lines to aid a wounded Marine, although he was seriously wounded himself. Despite a heavy concentration of fire, Wahlen carried the Marine to safety. The pharmacist's mate conducted many similar operations, defying enemy fire and the pain of his wounds to help his comrades.**

All military personnel on active duty for 90 days or more are eligible to enter the Inter-Service Contest, but only entries from naval and Coast Guard personnel will be entered in the All-Navy Contest. Armed forces personnel assigned to the U.S. Navy are considered members of the Navy for purposes of competition on the base, district and Fleet levels. However, all entries submitted by Air Force, Army or Marine Corps personnel should be forwarded to the nearest Air Force base, the nearest Army post, or the CO, Headquarters Battalion, Headquarters, U. S. Marine Corps, respectively, by 1 Oct 1962. NROTC and Reserve units are specifically excluded from participation in both contests.

You may submit entries in either or both of two groups.

For Group One (black-and-white single photographs) enlargements may vary from a minimum of 8 x 10 inches to a maximum of 16 x 20 inches. Entries must be unmounted and unmatted, and may not be tinted. Toning is permissible. Generally, negatives are not required; however, for all prize-winning or honorable mention entries in this group, negatives will be required upon notification of results of the Contest.

Group Two (color transparencies) entries may be up to 4 x 5 inches in size, and should be enclosed in plastic envelopes or other protective covering. All transparencies must be mounted and each must be marked with a red dot in the lower left corner of the mount when the transparency is held for normal viewing. Your name and rank or rate, together with the title and category, must be printed on the mount.

Categories for each of the two groups are: (1) Portraits; (2) babies and children; (3) animals and pets; (4) sports or action; (5) scenic; (6) military life; (7) experimental.

Official rules for the contests are:

- Any photograph taken by a contestant since 1 Dec 1960 may be entered.
- Official military photographs will not be accepted as entries.
- Entries deemed unworthy of consideration for exhibition may be withdrawn by contest officials.
- If an entry is determined to be not in the correct category, officials will transfer or disqualify it.
- Entries which do not conform to size restrictions, are improperly identified, or are improperly submitted will be disqualified.
- Color transparency entries will be returned to contestants. Although every possible effort will be made to assure safe return of entries, the Department of the Navy assumes no responsibility for loss or damage.
- Black-and-white entries submitted for the All-Navy Contest automatically become the property of the Department of the Navy, and will not be returned to contestants.
- No contestant may withdraw an entry during the contest.
- A copy of Enclosure (1) to BuPers Notice 1700 of 30 April may be used instead of a standard model release for individuals who are American citizens and are subjects of portrait photographs entered in the competition. An official entry blank must accompany each photo.

Group One entrants should affix a 3 x 5 card to the back of the photograph. This card should contain the picture's category; contestant's name, grade and service number, and his military address; name of the command forwarding the entry; and title of the entry. A Group Two entry should have a similar card enclosed. This is in addition to the information printed on the mount.

Awards will be made for the winning entry in each category of each group in the All-Navy Contest, while the next four place finishers will receive an honorable mention.

Awards for the Inter-Service Contest will be presented to the first three place winners and three honorable mentions in each category of both groups. "Best of Show" awards will be presented in each group.

WHAT'S IN A NAME

Supermart for Ships

In an age of mass merchandising, it was probably inevitable that ships would be supplied by supermarkets. One such supermarket for ships — the Piermart — is located in Newport, R. I.

Newport's Piermart pioneered the grocery store approach to supply to speed the flow of fast-moving and relatively inexpensive items for use aboard ship and to provide a ready source of "pre-expended" forms used by destroyers.

It is located in the Atlantic Destroyer Force Headquarters Building — about 20 steps from the brow of the nearest DD.

This is how it works. The ship's supply officer provides the shopper with a "money value only" requisition authorizing expenditure of a specified amount, and a rough shopping list. The shopping list is drawn up with the help of a Piermart Shopping Guide which is distributed to all Newport-based ships.

The Piermart customer goes through the same process as a housewife shopping at a self-service market. He pushes his shopping basket through the aisles and picks up the items on his shopping list.

When he is finished he gives the checker his authorization, and the cost of the items he has purchased is totaled at the checkout counter. The items are then assembled for him and he takes them back to his ship.

Behind the scenes, the ship's account is debited and the supply officer is advised of the actual amount spent.

The Newport Piermart, in addition to its supply of Navy forms, stocks a host of practical items, including all types of mess gear, electronics, small tools and other items too numerous to mention.

Recently, the Piermart stocked a line of medical items which do not require prescription.

The bottles are available in large, medium and small sizes. It is interesting to note that one of the largest bottles in the collection is filled with diamamine tablets — a remedy for seasickness. (Only members of the medical department are permitted to shop for medical items.)

Newport's Piermart has been operating for about a year, although it did not find immediate acceptance among ship supply officers who feared they might lose control of their inventories.

The supply officers were soon convinced they could save themselves time, money, and trouble by becoming customers.

Today, Newport's Piermart does a whopping $40,000 business per month and is constantly expanding. Other tidewater supermarkets are located at Norfolk, Long Beach and San Diego.

Applications Are Wanted For New Rating of Data Systems Technician

The Navy's use of electronic digital data systems in tactical operations has grown to the point where a special rating is required to identify qualified operators. As a result, a Data Systems Technician (DS) rating is now an official part of the enlisted rating structure.

Changeover to DS was automatically effected on 1 May for ETs, FTs and MAs (including designated strikers) who have been trained in the operation of the systems, as indicated by the following enlisted classification codes: ET-1561, ET-1562, ET-1563, ET-1564, ET-1565, ET-1566, ET-1567, ET-1568, ET-1569, MA-2743, MA-2762.

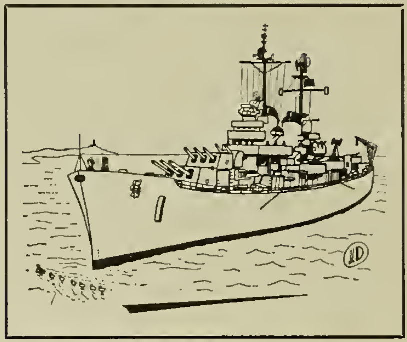
The new rating is in the "General Rating" category, Group III, Electronics, of the enlisted rating structure.

Duties of the DS have not yet been spelled out but, in general, involve the maintenance of electronic digital data systems in ships and operation control centers. A roundup of DS duties will be contained in changes to the *Manual of Qualifications for Advancement in Rating.*

Shifts to DS were made with no losses of pay grade or pro pay. The new DS personnel who drew pro pay in their old ratings will continue to receive it for the duration of the award. In addition, DS will probably be listed as "critical" for the next pro pay award — which could mean automatic pro pay.

Rating badges for DS will not be available until late this summer. In the meantime, DS personnel are authorized to wear their current rating badges.

All-Navy Cartoon Contest — 1961
John L. Draves, QM3, USN



"Now what rule of the road applies?"

Advancement prospects in the DS rating appear to be excellent, particularly for men who were automatically shifted by virtue of their classification codes. Past experience has indicated there are career advantages in early entry into newly established ratings. This, coupled with the expected critical DS category, may result in a rating that's wide open.

Beginning with the August 1962 advancement exams, men who were shifted to DS will be examined in the new rating. (Although a study guide based on DS qualifications is not yet available, preparations for advancement exams can be made through studies of the portions of the Navy Training Course for Electronics Technicians which cover electronic digital data systems operations, plus a review of school notes and military requirements.)

Training in DS skills is presently provided at the 16-week Computer Basic Course, Naval Training Center, Great Lakes, Ill., followed by a basic course in computer programming at the Naval Electronics Laboratory in San Diego, Calif., and factory training with certain corporations. Additional training which is considered to be on the C school level is provided in operation control centers.

Men who are undergoing DS-type training have been shifted to, or will be advanced in, as appropriate, the new rating.

Class A, B and C level DS schools may be established in the future. Details on the new schools will be made available as planning progresses.

Although former ET, FT and MA personnel are filling most of the DS billets, men in any rating, by virtue of training or experience, may be qualified to apply for a DS classification code with a view toward rating changes. Commanding Officers may make such recommendations to the Chief of Naval Personnel (Pers B-224) in accordance with BuPers Inst. 1220.26 (Enlisted Classification Assignment Control System).

BuPers Notice 1440 (19 Mar 1962) contains other details of the new rating, and is the official guide for COs to follow while effecting changes to DS.

Shifts to Be Made to Ratings Of Aviation ASW Technician

Steps have been taken to shift some Sonarmen and Aviation Electronics Technicians into a new General Rating to be designated Aviation Anti-Submarine Warfare Technician (AX) when it's adopted later this fall.

Advance word on the establishment of AX, and the official notice of a facelifting in the specialist categories of SO and AT, is contained in BuPers Notice 1440 (3 Apr 1962). In general, here's what's happening:

- The Service Rating SOO (Oceanographer) has been dropped from

DON'T CUT your shipmates short — there are nine others in line for this issue of ALL HANDS Magazine.

the SO General Rating. Effective 1 May 1962, all men who held the SOO designator were to be shifted to SOG (Sonarman-Surface) — another SO Service Rating.

- A third SO Service Rating—that of SOA (Sonarman-Airborne) — will be dropped when AX is officially established.
- The Service Rating ATS (Anti-Submarine Warfare Equipment) within the general AT rating category will be done away with at the same time SOA is dropped.

To start with, AX will be filled with qualified men of the ATS and SOA Service Ratings and AT and SO General Ratings. Normal advancements to AX will begin with the February 1963 exams.

Former SOOs who were shifted to SOG are to retain the Enlisted Classification Code SO-0411 (Oceanographic Specialist). Those who drew pro-pay are to continue receiving the extra money for the duration of the original award.

Chances for assignment to SOG "A" school are good for former SOOs who are "career motivated" and have sufficient obligated service.

BuPers Notice 1440, dated 3 Apr 1962, contains all the details.

New Courses Range from Sonar to Communications

Five new enlisted correspondence courses and one new officer course have been issued by the Naval Correspondence Course Center.

The new courses are:

ECC *Introduction to Sonar,* NavPers 91258.

ECC *Shipfitter 1 & C,* NavPers 91542.

ECC *Aviation Structural Mechanic "H" 3 & 2,* NavPers 91365.

ECC *Parachute Rigger 3 & 2,* NavPers 91639-1.

ECC *Equipment Operator 1 & C,* NavPers 91576-2.

OCC *Naval Communications,* NavPers 10416.

(No repeat credit if *The Communication Officer,* NavPers 10403, has been completed.)

The discontinued courses are:

ECC *Pipefitter 1 & C,* NavPers 91541-1.

ECC *Metalsmith 1 & C,* NavPers 91536-1A.

ECC *Aviation Structural Mechanic, 3 & 2,* Vol. II, NavPers 91623.

ECC *Driver 1,* NavPers 91575-1A.

ECC *Driver C,* NavPers 91576-1A.

ECC *Parachute Rigger 3 & 2,* Vol. II, NavPers 91605.

ECC *Parachute Rigger 3,* Vol. I, NavPers 91640-1A.

ECC *Parachute Rigger 2,* Vol. I, NavPers 91639.

OCC *Shorebased Communications,* NavPers 10996.

"At last . . . I've been here so long I was beginning to forget what another human being looked like."

Can You Meet These Quals? You May Become an Aviator

Have you ever envied the pilot of a Navy plane as it rests on the catapult ready to be shot from the deck of an aircraft carrier? *You* could be at the controls of that plane in less than two years if you have the interest and the qualifications.

The Naval Aviation Cadet Program is one way to get into that cockpit. To qualify, you must:

- Be an enlisted man of the Regular Navy or Naval Reserve on active duty.
- Be U.S. citizen.
- Have 60 semester hours (or 90 quarter hours) of unduplicated college work at an accredited college or university; or have 30 semester hours (or 45 quarter hours) of unduplicated college work at an accredited college or university, plus a minimum combined GCT/ARI of 120 and MECH score of 58. Successful completion of the USAFI General Education Development Test, one-year college level, will be accepted in lieu of the 30 semester or 45 quarter hours of unduplicated college work.
- Be at least 18 and under 25 years of age on application date.
- Agree to remain on active duty for three and one-half years after you finish flight training.
- Be unmarried and agree to remain unmarried until commissioned.
- Be physically qualified and aeronautically adapted for the actual control of aircraft in accordance with Chapter 15 of the *Manual of the Medical Department.* (Waivers of age and physical standards will not be granted.)

This program leads to a commission as ensign in the Naval Reserve. If you think you meet the above qualifications, submit your application to the Chief of Naval Personnel (Pers B6), via your commanding officer. BuPers Inst. 1120.20B gives all the details you should need.

Applications Open to Junior Officers in Regular Navy and Reserve for Flight Training

Commissioned officers of the Regular Navy, Naval Reserve officers and officer candidates who will receive ensigns' commissions are invited to submit applications for heavier-than-air flight training which will lead to designation as naval aviator (HTA).

In addition to these qualifications, an applicant must be less than 26 years old when he submits his application and have successfully completed at least four semesters of undergraduate work or its equivalent at an accredited college or university. He must have been in good standing when he finished his final semester of work.

He must be physically qualified and aeronautically adapted to control aircraft and not have been separated from any armed services flight training program except by reason of being temporarily physically disqualified.

Applicants must also make a score of at least three in the Aviation Qualification Test (AQT) and the Flight Aptitude Rating (FAR). Both these are U. S. Navy and Marine Corps Aviation Selection Tests.

Both Regular Navy and Naval Reserve officers will be required to serve three and one-half years after they complete flight training.

Full details concerning flight training qualifications are given in BuPers Inst. 1520.20B.

Here Are Two Methods of Solving the Same Kind of Problem

The following report was forwarded to All Hands *by the Commanding Officer, U. S. Naval Station, Boston, Mass. It discusses a problem that has arisen from time to time on ships and stations, and the long-range effect that can result, depending on the attitude of the individual involved. It makes interesting reading; worthwhile too.*

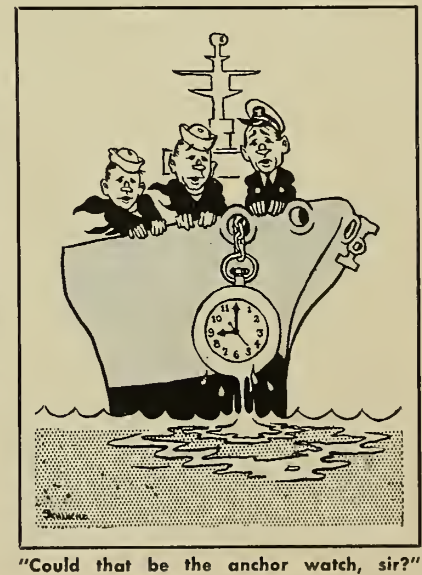
THE BRIG at Naval Station, Boston, Mass., has a number of men confined for court-martial sentences. Some of these men are repeaters. Some are determined to secure a discharge and are more than willing to accept a Bad Conduct Discharge. Through extensive counseling and educational programs some of these men are redirected toward a more purposeful life; others continue to foul up and receive the discharge they have been trying to get. The results of both of these attitudes are reflected in a letter from one person and a visit from another to this command. The letter reads:

"Dear Sir: I hope you don't mind my writing you, but as a former prisoner of the brig and a person who has learned the hard way and too late, I hope by telling you what has happened to me since I got kicked out of the service you can perhaps in some way help a man who is headed in the same direction. As you know, it has been almost a year and a half since I left the service and the Navy with a BCD, and at that time I thought I was pretty smart. I had done two years of my four-year tour and had managed to keep myself in trouble most of the time. Little then did I realize that the real trouble starts after a man gets kicked out with a BCD.

"After I had completed serving my sentence and received my discharge, I decided to go back home and try to pick up where I had left off. To my surprise I found this was not to be. Most of my buddies were themselves in the service of their country. When one would come home on leave I would see him on the street and he would ask me how I got out of the service so soon. But, then, what could I tell him? My parents were also grieved by what I'd done.

"My father, who had high hopes for me to continue my schooling or work with him at the factory would not speak to me. I have many times filled applications for jobs in various factories throughout the city. Tell me? What does one put down when on the application blanks you see the questions: 'Service completed? . . . ., Type of discharge? . . . . .' How can I answer those questions? The sad, but true, fact is I have no one to blame but myself and now I must go through life with the realization that I have failed my country, my family and most of all myself. So if you will, sir, when a prisoner tells you, 'I don't care how I get out of the service as long as I get out,' tell him the story about this sailor who thought he knew all the answers, but found out too late that he didn't know anything at all."

The visit of another man, in quite a different vein, reveals the pride of an individual who stayed and made good; One David Doe, EM3, was tried by special court-martial and awarded two months' confinement and forfeiture of $100.00 per month for two months. Prior to his unauthorized absence Doe was stationed in a destroyer. His immediate superior was a first class petty officer with whom he had a "personality clash." For a period of one year, Doe worked under conditions which, to his way of thinking, were most distasteful, and efforts to resolve the difficulties only met with what was, in his opinion, further harassment. Finally Doe decided to solve the matter in his own way, and absented himself for a period of about 60 days.



"Could that be the anchor watch, sir?"

While absent, he found he still had to have certain necessities, so this electrician's mate took a job chopping wood for $4.00 a day, just enough to feed himself. Thoroughly disgusted and disillusioned, he remained absent until, in his own words, "I felt like my life was over, and I knew I had to face the music, so I thought I would get it over with and then go on and finish the job on the outside."

During the first stages of his confinement, Doe resisted every effort, on the part of the counselors, to reach him. He had no hope for the future, and he strongly indicated that he did not care. After he was sentenced, however, Doe began to show some response to the counselors' efforts. Soon he began to see that even though he might not have gotten along with his immediate superior, this was a big Navy, and his continued aloofness and hostile attitude could only result in further problems throughout life. His response to rehabilitation became so rapid that his sentence was suspended early and he was sent back to the Fleet. Recently, this command was visited by a vigorous second class electrician's mate, now married, and studying for first class.

This man went on by virtue of his own efforts, once he accepted the guidance that he should have sought initially. In less than one year he went from a brig cell to the responsibilities of a successful and respected petty officer.

Management Course at Jax In Aviation Ordnance

A four-week course in the management duties of aviation ordnance officers has been introduced at the Naval Air Technical Training Unit in Jacksonville, Fla. The course is designed primarily for Limited Duty Officers. It specializes in publications, division duties, ordnance facility organization, ordnance supply, and general administrative qualifications necessary for assignment as a ship or station ordnance officer. The first class convened on 12 March. The course trains 10 officers.

August Is Date Now Scheduled For Release of Reservists Involuntarily Recalled to Duty

Involuntarily recalled Naval Reserve personnel will be released to inactive duty in August 1962 "unless there is a serious deterioration in the international situation in the meantime." Release date of the 8000 Naval Reservists, their ships and air squadrons is set for 1 Aug 1962.

Originally 18 Air Squadrons and 40 destroyer/destroyer escorts were recalled. Three of the air squadrons were reassigned to new permanent duty stations and 35 of the ships were reassigned to new home ports when they were recalled. The other squadrons and ships remained at their original locations.

The 35 reassigned ships will return to their original home ports two weeks before the scheduled release date. The three air squadrons will return to their original stations four weeks before the scheduled release date. The only exception is Patrol Squadron 661 which will move to its new location at Naval Air Facility, Andrews Field, Md., instead of Anacostia, D.C.

Shown at right are the affected units, their present duty assignments and the permanent duty stations to which they will return.

Naval Reserve Ships and Units Returning from AcDu

UNITS INVOLVED	PRESENT ACTIVE DUTY STATION	HOME DUTY STATION AS OF 1 AUG 1962
Alvin C. Cockrell (DE 366)	Pearl Harbor, Hawaii	San Francisco, Calif.
Albert T. Horris (DE 447)	Norfolk, Va.	Whitestone, N.Y.
Beorss (DD 654)	Norfolk, Va.	Norfolk, Va.
Chorles E. Bronnon (DE 446)	Pearl Harbor, Hawaii	Seattle, Wash.
Coates (DE 685)	Newport, R. I.	New Haven, Conn.
Calahan (DD 658)	Long Beach, Calif.	Long Beach, Calif.
Daniel A. Joy (DE 585)	Newport, R. I.	Chicago, Ill.
Dorby (DE 218)	Newport, R. I.	Baltimore, Md.
Delang (DE 684)	Newport, R. I.	Fort Schuyler, N.Y.
Edmonds (DE 406)	Pearl Harbor, Hawaii	San Francisco, Calif.
Greenwood (DE 679)	Key West, Fla.	St. Petersburg, Fla.
Haward D. Crow (DE 252)	Key West, Fla.	Galveston, Texas
Hunt (DD 674)	Newport, R. I.	Jacksonville, Fla.
Huse (DE 145)	Key West, Fla.	New Orleans, La.
J. Douglas Blockwood (DE 219)	Newport, R. I.	Philadelphia, Pa.
Jahn Haod (DD 655)	Newport, R. I.	New York City
Kidd (DD 661)	Norfolk, Va.	Philadelphia, Pa.
Lows (DD 558)	San Diego, Calif.	San Francisco, Calif.
Laeser (DE 680)	Newport, R. I.	Yorktown, Va.
Morsh (DE 699)	Pearl Harbor, Hawaii	Long Beach, Calif.
McGinty (DE 365)	Pearl Harbor, Hawaii	Portland, Ore.
McNoir (DD 679)	Norfolk, Va.	Philadelphia, Pa.
Miller (DD 535)	Newport, R. I.	Boston, Mass.
Porle (DE 708)	Newport, R. I.	Providence, R.I.
Remey (DD 688)	Newport, R. I.	New York City
Robert F. Keller (DE 419)	Norfolk, Va.	Washington, D.C.
Roberts (DE 749)	Norfolk, Va.	Norfolk, Va.
Robinson (DD 562)	Newport, R. I.	Charleston, S.C.
Snowden (DE 246)	Key West, Fla.	Philadelphia, Pa.
Tills (DE 748)	Norfolk, Va.	Portland, Maine
Tingey (DD 539)	San Diego, Calif.	Long Beach, Calif.
Thoddeus Porker (DE 369)	Norfolk, Va.	Port Newark, N.J.
Tweedy (DE 532)	Norfolk, Va.	Pensacola, Fla.
Vommen (DE 644)	Pearl Harbor, Hawaii	Long Beach, Calif.
Wolton (DE 361)	Pearl Harbor, Hawaii	San Francisco, Calif.
Watts (DD 567)	Long Beach, Calif.	Tacoma, Wash.
Whitehurst (DE 634)	Pearl Harbor, Hawaii	Seattle, Wash.
Wisemon (DE 667)	San Diego, Calif.	San Diego, Calif.
Woodson (DE 359)	Norfolk, Va.	New Orleans, La.
Wren (DD 568)	Norfolk, Va.	Galveston, Texas
VP 661	Patuxent River, Md.	NAF Andrews, Md. (Was NAS Anacostia, D.C.)
VP 741	Patuxent River, Md.	NAS Jacksonville, Fla.
VP 832	Norfolk, Va.	NAS New York City
VP 872	Alameda, Calif.	NAS Alameda, Calif.
VP 933	Norfolk, Va.	NAS Willow Grove, Pa.
VS 721	Seattle, Wash.	NAS Glenview, Ill.
VS 733	South Weymouth, Mass.	NAS Grosse Ile, Mich.
VS 751	Lakehurst, N.J.	NAS Lakehurst, N.J.
VS 771	Los Alamitos, Calif.	NAS Los Alamitos, Calif.
VS 772	Los Alamitos, Calif.	NAS Los Alamitos, Calif.
VS 821	New Orleans, La.	NAS New Orleans, La.
VS 837	New York City	NAS New York City
VS 861	New Orleans, La.	NAS Norfolk, Va.
VS 872	Alameda, Calif.	NAS Alameda, Calif.
VS 873	Alameda, Calif.	NAS Alameda, Calif.
VS 891	Seattle, Wash.	NAS Seattle, Wash.
VS 915	South Weymouth, Mass.	NAS South Weymouth, Mass.
VS 935	Lakehurst, N.J.	NAS Willow Grove, Pa.

Notification Policy Set for Future Reserve 'Call Up'

One of the problems connected with last fall's partial mobilization of Reserves concerned the timing of the release of information to the press and the alert notification to individual Reservists.

A survey conducted by the Army indicates that 86 per cent of the Reservists learned of the recall of their units from news media, rather than through command channels. To prevent a recurrence of this problem, a system has been devised to notify most members of recalled units through official channels prior to, or concurrent with, release of the information to news media.

To accomplish this, each military department will use an alerting system for notifying members of recalled units capable of meeting the following schedule when a mobilization decision is announced to the military department by the Secretary of Defense.

- *F-Hour:* Secretary of Defense directs military departments to order recall and makes general announcement of numbers by service and of duration of service.
- *F plus 12 hours:* All active establishment headquarters concerned are notified by classified message.
- *F plus 12 to F plus 18 hours:* Unit commanders and advisers of all

affected Reserve units are notified by secure means.

- *F plus 18 hours:* Units institute alert notification to individuals.
- *F plus 24 hours:* Detailed information is made available to Congress, followed by a public announcement by SecDef.

At the time SecDef directs the military departments to initiate a callup of Reservists, he will make a general press announcement indicating the number of Reservists to be recalled and the length of time their services may be required, but he will not identify the units. The "F plus 24-hour" announcement will contain the designation of units. This information will be given first to Congress and then to the news media.

This is not to be interpreted as indicating in any way that future callup of Reservists and Guardsmen is imminent or contemplated.

Report Shows One in Eight Applicants Was Selected For NROTC This Year

Some facts and figures on the Naval Reserve Officer Training Corps Program for the 1962 - 63 school year have been compiled by state NROTC selection committees and the Chief of Naval Personnel. Here's a roundup:

- Of 16,000 high school seniors who last fall applied for the Regular NROTC Program, 2092 were selected.
- Another 1395 were picked as alternate candidates.
- 156 Contract students already in college were selected for transfer to the Regular program.
- Active duty enlisted men will fill 52 Regular NROTC vacancies.

Participation in the NROTC Program generally means four years of schooling at one of 52 colleges and universities throughout the U.S. The Navy pays most, or part, of the students' expenses. NROTC candidates, upon graduation, receive Navy or Marine Corps commissions and serve on active duty for two or four years.

The over-all NROTC Program is divided into two scholastic categories — Contract and Regular.

Regular NROTC students receive tuition, textbooks, special equipment, uniforms, and $600 per year during the full four-year college tour. Three summer cruises are part of the curriculum. Upon graduation, candidates are commissioned ensign in the Regular Navy or first lieutenant in the Marine Corps, and serve on active duty for four years.

A program committee in each state annually selects qualified high school seniors who apply for the Regular program. Successful applicants enter college each September and receive appointments as midshipmen, USNR.

Contract students are more on their own. Appointments to the contract program are made by professors of naval science of the colleges or universities concerned, on the basis of personal interviews, school and community reputation, and the results of the Navy College Aptitude Test. Contract students receive textbooks used in the naval science course only, uniforms, and a ration allowance of $27 a month during the last two years of college.

The Contract student makes one summer cruise, and upon graduation is commissioned ensign or second lieutenant in the Naval or Marine Corps Reserve and, beginning with those who enter the program after 30 Jun 1962, will serve on active duty for three years and in the Reserve for three years. Contract students may transfer into the Regular NROTC Program if they meet competitive requirements.

Some active duty enlisted men entered NROTC in the past. However, this phase of the program will be discontinued in 1963.

Education For Children Of Deceased Navymen

Do you know any college-age children of deceased Navymen? If so, you may wish to call this item to their attention. It's a brief question and answer session designed to clear up five major misconceptions which appear to be keeping many eligible children from applying for educational benefits due them.

- *Question* — Does the fact that one parent of the child of a deceased serviceman is still living disqualify that child?

Answer — No. According to the VA, for educational benefits an "orphan" is a child whose veteran-parent is dead as the result of a wound, accident or illness, attributable to service in the armed forces.

- *Question* — Does the fact that the deceased veteran had no wartime service make his child or children ineligible?

Answer—No. If the veteran-parent's death resulted from the performance of duty or from extra-hazardous service during peacetime, his child or children are eligible.

- *Question* — Can children of deceased veterans be married and still remain eligible?

Answer — Yes. Marriage does not affect eligibility. Any son or daughter of a serviceman whose death is attributable to his service is eligible for the educational benefits provided he or she is between 18 and 23 years of age. (There are even exceptions to these age limits. Full details may be obtained from any VA office.)

- *Question* — If the living parent (usually the mother) has remarried and the stepfather has legally adopted the children, does this make the children ineligible?

Answer — No. Any marriage of the living parent and/or subsequent adoption does not affect the eligibility of the children.

- *Question* — Does the fact that children may not wish, nor be prepared to, take advantage of educational benefits at the college level rule them out of taking advantage of other educational benefits?

Answer — No. Although training for a high school diploma is not permitted, eligible children may take vocational courses and other noncollege training that will help them earn a living.

More than 41,000 children in the U. S. have already taken or are now taking advantage of the benefits of the War Orphans Educational Program. VA officials will be glad to explain the program in detail.

ANSWERS TO QUIZ AWEIGH

The Seabees are celebrating their 20th anniversary this year, and all of the questions asked concerned men in the Construction Group ratings (Group VIII). Here are the correct answers to the Quiz Aweigh found on page 49.

1. **(c) Builder.**
2. **(b) Utilities man.**
3. **(a) Engineering aid.**
4. **(b) Steelworkers.**
5. **(c) Construction electricians.**
6. **(a) Construction mechanics.**
7. **(a) Equipment operator.**

DECORATIONS & CITATIONS

LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ Evans, Griffith C., Jr., CDR, usnr, for service during Operation Deep Freeze 61 as Commanding Officer, uss *Edisto* (AGB 2), attached to U. S. Naval Support Force, Antarctica. CDR Evans directed his ship in the successful accomplishment of all operational commitments; despite adverse weather conditions, he skillfully supervised the efforts of his crew and embarked scientists in completing an important oceanographic program in the western Ross Sea late in the Antarctic summer. When ordered to return to Antarctic waters in late March to attempt recovery of *YOG 34,* adrift in the Ross Sea with 200,000 gallons of aviation gasoline on board, he proceeded south without delay. En route, *Edisto*, encountering hurricane-force winds and mountainous seas, sustained considerable topside damage and severe icing. Displaying expert ship-handling, CDR Evans brought his vessel safely to port, despite the dangerous weather and the loss of his starboard propeller. His seamanship and inspiring devotion to duty reflect great credit upon himself and the U.S. Naval Service.

DISTINGUISHED FLYING CROSS

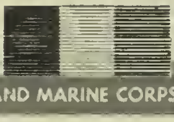
"For heroism or extraordinary achievement in aerial flight . . ."

★ Nordberg, Delbert W., LCDR, usn, for extraordinary achievement in aerial flight during the period 3 Mar to 12 Apr 1962. As pilot of a Navy all-weather fighter aircraft, the F4H-1 *Phantom* II, LCDR Nordberg succeeded in establishing new world class records for time to climb to 15,000 meters and 30,000 meters, attaining a time of 114.548 seconds from a standing start to 15,000 meters altitude, and 371.43 seconds from a standing start to 30,000 meters altitude. Through his exceptional achievement, he clearly demonstrated the inherent capabilities and the maximum performance of a most important aircraft of the U. S. Navy. In addition, he was instrumental in focusing world attention on the continued significant development of the science of aviation in the United States.

★ Brown, Francis T., LCDR, usn, for extraordinary achievement in aerial flight on 31 Mar 1962. As pilot of a Navy all-weather fighter aircraft, the F4H-1 *Phantom* II, LCDR Brown succeeded in establishing a new world class record for time to climb to 20,000 meters, attaining a time of 178.5 seconds from a standing start to 20,000 meters altitude. Through his exceptional achievement, he clearly demonstrated the inherent capabilities and the maximum performance of a most important aircraft of the U. S. Navy. In addition, he was instrumental in focusing world attention on the continued significant development of the science of aviation in the United States.

★ Longton, David M., CDR., usn, for extraordinary achievement in aerial flight on 21 Feb 1962. As pilot of a Navy all-weather fighter aircraft, the F4H-1 *Phantom II,* CDR Longton succeeded in establishing a new world class record for time to climb to 6000 meters, attaining a time of 48.787 seconds from a standing start to 6000 meters altitude. Through his exceptional achievement, he clearly demonstrated the inherent capabilities and the maximum performance of a most important aircraft of the U. S. Navy. In addition, he was instrumental in focusing world attention on the continued significant development of the science of aviation in the United States.

★ Young, John W., LCDR, usn, for extraordinary achievement in aerial flight during the period 21 Feb to 3 Apr 1962. As pilot of a Navy all-weather fighter aircraft, the F4H-1 *Phantom* II, LCDR Young succeeded in establishing new world class records for time to climb to 3000 meters and 25,000 meters, attaining a time of 34.523 seconds from a standing start to 3000 meters altitude, and 227.6 seconds from a standing start to 25,000 meters altitude. Through his exceptional achievement, he clearly demonstrated the inherent capabilities and the maximum performance of a most important aircraft of the U. S. Navy. In addition, he was instrumental in focusing world attention on the continued significant development of the science of aviation in the United States.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ Berryman, William H., HMC, usn, for heroic conduct on 15 Dec 1961 while serving with Explosive Ordnance Disposal Unit One, Pearl Harbor, Oahu, Hawaii. Engaged in diving operations at a depth of 75 feet in waters off Pearl Harbor Entrance when a fellow diver experienced difficulty and began to go into convulsions, Berryman, along with another diver, quickly moved to assist the victim to the surface. Despite the great personal danger from the physiological effects of emergency ascent from the ocean depths, Berryman persisted in his rescue efforts, at the same time taking the necessary actions to prevent further mishap to the disabled diver. After reaching the surface and placing the helpless man in the diving boat, Berryman administered first aid and resuscitation until medical facilities could be reached at the Submarine Base, Pearl Harbor.

★ Grose, Wilbur H., Jr., BM2, usn, for heroic conduct on 15 Dec 1961 while serving with Explosive Ordnance Disposal Unit One, Pearl Harbor, Oahu, Hawaii. Engaged in diving operations at a depth of 75 feet in waters off Pearl Harbor Entrance when a fellow diver experienced difficulty and began to go into convulsions, Grose, along with another diver, quickly moved to assist the victim to the surface. Despite the great personal danger from the physiological effects of emergency ascent from the ocean depths, Grose persisted in his rescue efforts, at the same time taking the necessary actions to prevent further mishap to the disabled diver.

★ Ortego, Paul E., AE3, usn, for heroic conduct in rescuing two men from a blazing vehicle on U.S. Highway 395 in San Diego, Calif., on the early evening of 22 Nov 1961. The first to reach the scene of the accident in which an automobile collided with another, rolled over, and burst into flames, Ortego, along with a companion, immediately rushed to the burning vehicle, loosened the seat belts of the two occupants, and succeeded in removing the victims to safety.

BOOKS

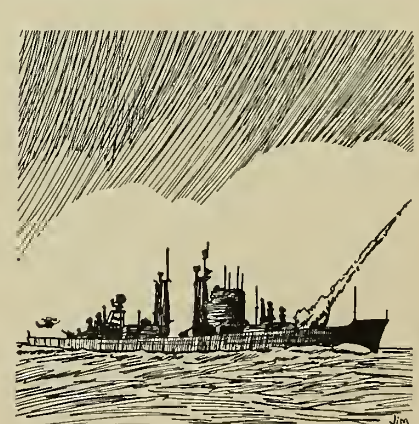
YOU HAVE A BIG CHOICE OF BOOKS ON ALL SUBJECTS

MANY DISCUSSIONS of British naval history suggest that Admiral John Byng, whose fleet was defeated at Minorca 18 May 1756, was rightfully executed for incompetence and cowardice. Not so at all, exclaims author Dudley Pope, most emphatically. In **At Twelve Mr. Byng Was Shot,** Pope, who is himself British, sets out to prove that: "The trial and execution of Admiral the Hon. John Byng was one of the most cold-blooded and cynical acts of judicial murder in all British history." And, as he did earlier in *Decision at Trafalgar* and *Graf Spee,* Pope makes his point with overwhelming attention to detail, presented in most readable form. The true villains, according to Pope, who deserved the epithet of "Treason" (for which Byng was actually executed, were "those ministers who actually contrived the disgrace and trial of the admiral so that he should be the scapegoat for their tardiness, stupidity and neglect." As might be suspected from the above most brief synopisis, Pope does not hesitate to take a most definite stand when one of his heroes is involved. If you're interested in historical sidelights, you'll enjoy this one.

Burke Davis is a busy man. In April, mention was made in these pages of his new book *Marine!* This month, we introduce his **The Cowpens-Guilford Courthouse Campaign.** It's more interesting than the title might indicate. It deals with a relatively little-known incident which did much to determine the outcome of the Revolutionary War. In 1781, General Daniel Morgan faced — and whipped — the British at Cowpens, S. C., but, because he did not have sufficient forces to consolidate his victory, was forced to retreat. He was too crippled to sit on a horse, and his place was taken by the Quaker general Nathanael Greene, who began a long guerrilla retreat only to fight another battle at Guilford Courthouse two months later. Although this was technically a defeat, the British retreated, the Americans won their campaign, ended British aggression in the South and made possible the conclusive victory at Yorktown. As in *Marine!* Davis again makes his men so very human. For those who like exciting books.

At times it's difficult to separate history from contemporary events. You'll have to decide for yourself where you would place **Hell at 50 Fathoms,** by VADM Charles A. Lockwood, USN (Ret) and Col. Hans Christian Adamson, USAF (Ret). They tell the story of U. S. submarine disasters from the sinking of *S-4* off Honolulu in 1914 to the loss of the Fleet submarine *Cochino* by fire off Norway in 1949. But their story is more than just a dreary accounting of catastrophe. Through all these tragedies of the sea, the book makes most clear, the Navy has been working to prevent further disasters. The Momsen lung, the rescue chamber, escape hatches, and newer techniques and developments have been the result. Nevertheless, it is a reminder that, in spite of the modern world of atomic subs, skindivers and greatly increased knowledge of underwater life, the sea is still around us.

The mention of skindivers was not entirely fortuitous. It serves as an introduction to the mention of **The New Science of Skin and Scuba Diving,** developed by the Conference for National Cooperation in Aquatics. Among other subjects, it discusses your body and its reactions to underwater pressures; equipment, how to select, test and keep it in good working order; the best techniques for getting under and staying there; how to protect yourself and to cope with emergencies that may occur. Includes the latest decompression tables.



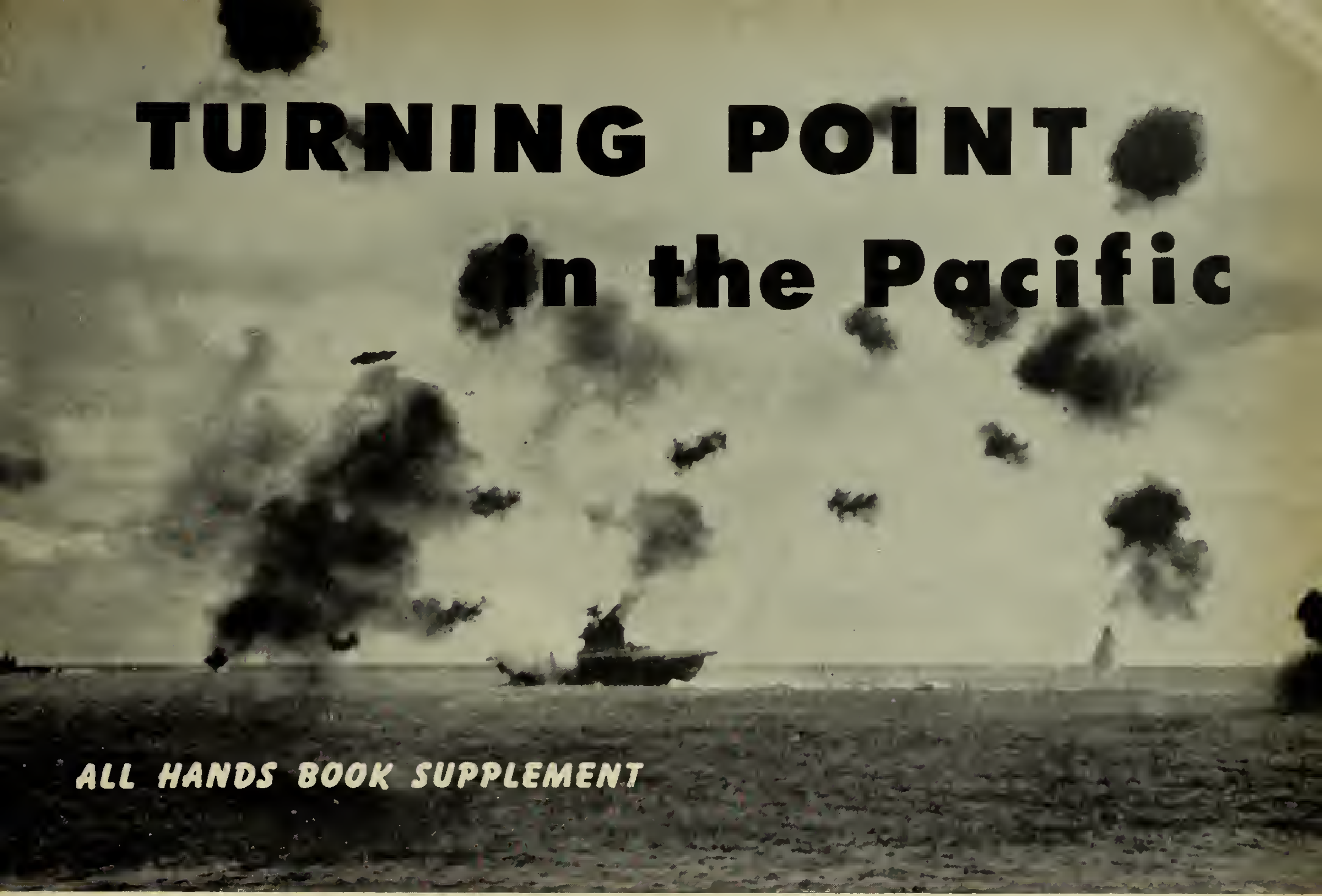
Books concerning guerrilla warfare are rapidly becoming almost as popular as those about underwater swimming. However, the subject is not, as a rule, quite so cheerful. **Modern Guerrilla Warfare,** edited by Franklin Mark Osanka, is another no-nonsense discussion of the uses of guerrillas in modern warfare. In 37 selections, including the basic writings of Lenin and Che Guevara, leading civilian and military authorities describe and analyze major guerrilla movements of the last 20 years. The book shows how the communists, in particular, have mastered guerrilla tactics and applied them in various parts of the world. As a brighter note, it is also pointed out that this form of warfare is being understood in the free world, and that successful countermeasures have been devised.

Not entirely in the line of professional development, yet of considerable personal interest to Navymen is **The World of Ice,** by James Dyson. His thesis that ice affects us all, from ice cubes in drinks to mighty glaciers, is undisputable. To prove his point, Dyson shows how the phenomena of ice and snow are formed, how they affect weather and the appearance of the globe, and how they sometimes do devastating damage to human life. Glaciers, icebergs and the several "ice ages" are handled with neatness and dispatch, yet not in overly technical style. His discussion of what might happen if the world were to experience another ice age is of interest to us all. Cool, man, cool.

Knowledgeable submariners will shudder at the goings-on to be found in **Down the Hatch,** by Don Winton, who was earlier responsible for *We Joined the Navy* and *We Saw the Sea.* Non-purists, however, will probably be delighted with the irreverent approach to a subject usually confined to the grim-jawed, steely-eyed school of fiction. The jargon and geographical clues would seem to indicate the HMS *Seahorse* is a member of the British Navy. This is a fallacy. No Navy would be large enough, or strong enough, to cope successfully with her.

The Lily and the Lion, by Maurice Druon, brings to a close *The Accursed Kings,* the great historical fresco of the first four decades of the 14th century. It views the struggle for kingly power between the unemployed royalty of England, France and Italy. Among the best of recent historical fiction.

TURNING POINT in the Pacific



ALL HANDS BOOK SUPPLEMENT

Twenty years ago, one of the most crucial engagements of World War II, the Battle of Midway, took place. For the first time, the triumphant passage of the Japanese Navy was checked, and the initiative passed into U. S. hands.

Any major event, possessing as many facets of human endeavor as a naval battle, readily lends itself to several interpretations. The June 1962 issue of "Naval Aviation News," for example, gives an excellent specialized account of the U. S. Navy and Marine air action during the battle. In these pages, a more generalized, over-all picture is drawn.

FAR OUT IN THE blue Pacific lies the island of Midway. Its beautiful white beaches surpass those of world-renowned Waikiki. Inside the coral reef which encircles the island, the still, crystal waters attract swimmers and skin divers.

Small boats run back and forth to the reef and, more often than not, return with fish and lobsters.

In the quiet twilight hours, it is not unusual to see families enjoying a steak fry or wiener roast in the island's picnic areas under the Australian ironwood trees.

In June 1962, 20 years after the United States and Japanese navies clashed in a monumental struggle for the possession of the island, only the gooney birds dispute United States sovereignty.

The picture was not quite so pleasant in June 1942. A major segment of the Japanese Navy, including four large carriers, steamed toward the island which was defended by a wide assortment of United States planes (many of them obsolete) and two American task forces built around three aircraft carriers.

THE ODDS WERE HEAVILY in favor of the Japanese. After Pearl Harbor, the United States had suffered one humiliation after another. With the exception of the Battle of the Coral Sea a month before, the Imperial Japanese Navy's complete mastery of much of the Pacific was, for every American, an unpleasant fact of life.

First U.S. contact with the enemy was made on 3 June, when Japanese transport ships were spotted and attacked about 600 miles from Midway.

Early on the morning of 4 June, a Midway patrol plane reported many enemy aircraft headed toward the island. A few minutes later, another patrol reported enemy carriers and other ships only 180 miles distant.

All planes on Midway were ordered into the air. The bombers and dive bombers were to attack the carriers. The fighters were ordered to protect Midway.

Japanese bombers and fighters were engaged by Midway's fighters some 30 miles from the island. Each pilot had time for only one or two passes at the bombers before he had from one to five *Zekes* on his tail.

Midway's anti-aircraft opened up as the Japanese formation came within range. The AA barrage failed to stop the Japanese, and bombs began to fall at 0630.

Within the next half hour, Nipponese bombs had damaged almost everything above ground. The powerhouse had been hit; the fuel tanks were set afire; a hangar destroyed. Only the runways, which the Japanese pilots expected to use themselves escaped injury.

When it was all over, the United States fighters were told to land. Few were left to respond. Of the 27 which had taken to the air only a dozen returned, and most of them were severely damaged.

ALTHOUGH THE TOLL in American aircraft was great, the Japanese suffered too. Fully a third of the attackers never returned to their carriers.

The American B-26s and TBFs sent to attack the carriers were completely unsuccessful. Five of the six TBFs and two of the four B-26s were shot down. The three that returned to Midway were so badly damaged that they were of no further use.

Only eight, of a flight of 16 planes from Midway's Marine bombing squadron returned to the island, and six of the eight were badly shot up.

The only "bright spot" in the otherwise unrelieved gloom was that the 15 B-17s which attacked at 20,000 feet suffered no casualties — but neither had they inflicted any on the enemy.

A second flight of Marine scout-bombers was unable to get through to the heavily protected carriers so they dropped their bombs on a battleship. The story was the same — no hits, and two planes failed to return to Midway.

In the first morning's attack, half the island's defending planes were lost, and not one enemy vessel had been damaged. Round one had gone to the Japanese.

DESPITE THE EXTENSIVE DAMAGE done by the Japanese to Midway's ground facilities and defending aircraft, the Japanese flight leader reported another strike would be necessary. This provided an entry point for the United States aircraft carriers.

Rear Admiral Raymond A. Spruance, commander of Task Force 16, had originally intended to approach within 100 or so miles of the Japanese striking force before he launched his planes from USS *Hornet* (CV 8) and *Enterprise* (CV 6) but the news of the attack on Midway caused him to believe he might catch the Japanese planes on their carrier decks as they returned.

His logic and timing were precise and his decision might well be regarded as one of the most crucial of the battle.

The decks of the Japanese carriers were full of planes when the first of 116 planes from *Enterprise* and *Hornet* arrived.

Shortly after the planes from Task Force 16 had taken off, Rear Admiral Frank Jack Fletcher, Task Force 17 commander, launched 35 planes from USS *Yorktown* (CV 5), holding back half her bombers in readiness to attack still unlocated Japanese carriers.

Hornet's planes missed the enemy at the expected point and turned south, thinking the Japanese would close in on Midway. Actually the Japanese had turned north to gain time in rearming their planes.

The *Enterprise* air group commander, proceeding separately, also missed the enemy at the expected point, but luckily turned north, making contact with the Japanese carriers at about the same time as *Yorktown's* bombers.

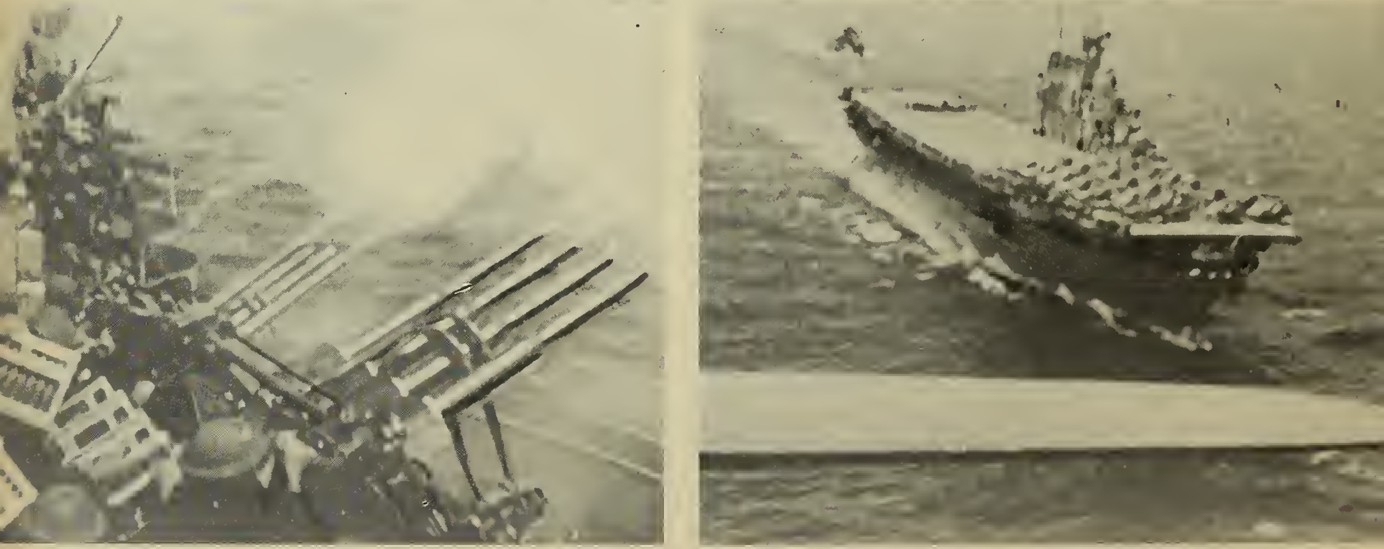
MEANWHILE *Hornet's* torpedo squadron of 15 planes, which had become separated from its fighter escort had found the enemy and, without waiting for support, attacked.

When they were about eight miles from the four enemy carriers, they were met by overwhelming fighter opposition. Although they tried desperately to reach the carriers, they were shot down one by one.

Of the entire squadron, Ensign G. H. Gay, USNR, was the only surviving pilot. Slightly wounded, he had managed to escape from his plane as it sank, and hid under a rubber seat cushion to avoid strafing. He had a fine, albeit precarious, view of the battle that followed.

At first, it did not go so well for the United States forces. Fourteen *Enterprise* torpedo planes, also separated from their fighter escort which had remained at a high altitude expecting the enemy there, made a

MIDWAY ACTION—Carrier gunners fire at enemy planes. *Rt:* U.S. flattop readies planes for air battle.



heroic attempt to get within torpedo firing range.

Ten were shot down, but a few managed to fire their torpedoes — all without effect. They were followed by 12 *Yorktown* torpedo planes, but only five of them managed to launch their torpedoes.

Of the 41 torpedo planes which had attacked from three U. S. carriers, only six returned home. However the sacrifice of the torpedo squadron was not entirely in vain. Their attacks on the carriers had drawn the enemy fighters down to a low altitude and, concerned with the torpedo planes, the Japanese left themselves open to a thrust from above.

THIS NARROW VIEW proved to be fatal, as it soon became evident, but by then it was too late.

The *Enterprise* dive bombers had split into two groups which attacked the carriers *Akagi* and *Kaga.* As Admiral Spruance had hoped, the decks of both carriers were covered with planes being refueled, and havoc reigned as the American bombs exploded among them or penetrated the flight deck to cause serious damage below.

These United States planes had no opposition from Japanese fighters until after they had completed their dives. The fighter opposition came too late, for by this time both carriers were burning.

Luckily, the planes from *Yorktown,* which were launched an hour later than those from *Enterprise* and *Hornet,* arrived at the scene at the same time. Rapidly clearing weather had enabled them more quickly to locate the enemy.

Without plan, the *Yorktown* bombers' attack coincided with that of *Enterprise.* Because of the preceding attack of the torpedo planes and the fact that *Yorktown's* bombers dived on the carrier from out of the sun, they encountered no fighter opposition and little from the carrier's anti-aircraft batteries.

Thirteen dives on *Soryu* left the carrier so completely in flames that four remaining planes did not consider her worth any more attention and turned their efforts toward other targets.

HAD NOT ADMIRAL Sprance suspected that the Japanese carriers would be in a vulnerable position and dispatched his planes at the opportune moment, the outcome of the United States carrier-based plane attack would undoubtedly have been considerably different.

Of the four Japanese carriers that steamed toward Midway on the third of June, only one, *Hiryu* remained. When her sister ships were put out of action *Hiryu* escaped undamaged to the north.

Later in the morning of the fourth of June — at about 1100, *Hiryu* launched 18 bombers and six fighters and, about two and one-half hours later, 10 torpedo planes and six fighters. This was a force adequate to take care of the one American carrier of which the Japanese were aware.

At 1159, *Hiryu's* planes were picked up on radar by *Yorktown,* which had launched her search planes at 1133 and was refueling fighters and preparing to recover her striking force. Fueling was discontinued and the fighters were launched. Homecoming bombers were waved away and decks were cleared for action.

When *Hiryu's* planes came in for the attack shortly after noon, they were met with anti-aircraft fire from *Yorktown's* escort vessels, which were in the standard circular disposition with a cruiser on each bow. The combat air patrol from *Enterprise* and *Hornet* came to the assistance of *Yorktown's* fighters, making a total of 28.

THE JAPANESE PLANES were split into two small groups, and only eight of the aircraft managed to get through to score three bomb hits, but they were enough to leave *Yorktown* dead in the water for over an hour.

When *Hiryu's* torpedo group was only 40 miles away, it was picked up by *Yorktown's* radar. A few of

OFF MIDWAY—Movie film shows Navy dive bombers making run at burning enemy ships in 1942.

ON MIDWAY—National ensign is raised over island amid fires started by attacking Japanese planes.

BATTLE SCARS—View of Midway after attack shows damage before Japanese raiders were beaten off.

the Japanese planes penetrated the screen thrown up around the carrier by defending aircraft and escorts, but a few planes penetrated the defense and caught the carrier with two torpedoes.

Yorktown was listing so badly by 1500 that she seemed in danger of capsizing, and her captain ordered abandonment. *Yorktown* was abandoned and that night the destroyer *Hughes* (DD 410) was ordered to stand by to sink her in case capture seemed imminent.

At 1330 on 6 June a Japanese sub attacked *Yorktown* and USS *Hammann* (DD 412), which was attempting to keep the carrier afloat. *Hammann,* hit once, sank in four minutes. *Yorktown* took two torpedoes, but stayed afloat until 0600 the next day.

About the time the attack on *Yorktown* ended, scout planes reported the presence of *Hiryu* and escorting vessels about 100 miles west northwest.

Enterprise launched an attack of 24 bombers which included 10 taken off the listing *Yorktown.* Fighters were kept on board to protect the carriers in case of an attack.

Enterprise's planes sighted *Hiryu* at 1700. There were a few *Zekes* in the air, which managed to shoot down three bombers, but the others planted four hits on the carrier.

Their aim was so effective that, when *Hornet's* planes arrived, a half an hour later, *Hiryu* was burning so fiercely they attacked escorting vessels instead.

DESPITE THEIR LOSSES, the Japanese could still have been the victors at Midway. Admiral Yamamoto, commander of the Main Body of the Japanese fleet, was under the impression that two of his carriers had been destroyed by one American carrier, and that *Hiryu* was on its way to take care of that.

He issued an order to the effect that the United States forces were retiring with the Japanese in pursuit and on their way to occupy Midway.

Also, according to Yamamoto, the Mobile Force, Second Fleet and Submarine Force were to immediately contact and attack the enemy. Either Yamamoto was ignorant of the facts or was attempting to sustain Japanese morale.

A boost in the latter was badly needed, for Vice Admiral Nagumo, head of the Japanese First Mobile Force, did not share Yamamoto's enthusiasm for attack in any degree. He informed Yamamoto that the strength of the United States force consisted of five carriers, six cruisers and 15 destroyers, and that they were steaming westward not eastward as Yamamoto had said.

Yamamoto then placed Vice Admiral Kondo, Commander of the Second Fleet, in command of the Mobile Force excepting *Miryu, Akagi* and their escort vessels. He also ordered a submarine to shell Midway until it was relieved by a cruiser.

Kondo immediately marshaled his forces — four battleships, nine cruisers and 19 destroyers, for a night surface engagement.

THE DECISION for further action of the United States forces had been left by Admiral Fletcher, to Admiral Spruance, who felt he could not risk a night encounter with the Japanese, yet wanted to be within striking distance to foil a possible attack on Midway or to pursue a retreating enemy. He gave the order to steam east for the night.

By midnight, it was obvious to Yamamoto that he could not force a showdown between the two forces, and that he would be vulnerable from the air after dawn broke.

He canceled his orders to Kondo and instructed him to rendezvous with the main body and then canceled the Midway shelling and landing operations and ordered withdrawal to the west.

The Japanese submarine's shelling of Midway proved to be a postlude rather than a prelude to the Japanese invasion attempt. It served a purpose to the advantage of the Japanese, however. A few minutes after midnight, the United States submarine USS *Tambor* (SS 198) reported many unidentified ships about 90 miles west of Midway.

The presence of the ships, plus the shelling of Midway, naturally added up to a landing attempt to Admiral Spruance, who ordered a course north of Midway at 25 knots. United States submarines were pulled to within five miles of Midway, by orders from Pearl Harbor, for the same reason.

ALTHOUGH IT SEEMED INCREDIBLE to the American commanders that the Japanese would attempt a landing in view of their losses, the possibility could not be ruled out.

What the *Tambor* had seen were the four cruisers and two destroyers ordered by Yamamoto to relieve the submarine in shelling Midway. Shortly after the sighting, the Japanese force received Yamamoto's orders to retire and put about. During the night the Japanese spotted *Tambor,* and the cruisers *Mogami* and *Mikuma* collided while trying to avoid her.

When morning came, *Tambor* was able to identify the vessels she was following as two *Mogami*-class cruisers on a westerly course.

The remainder of the day was something of a loss. Planes were sent out to attack, but with the exception of damage done by a Marine plane diving into the after turret of *Mikuma,* no damage was done to the retreating Japanese.

The morning of the sixth of June found the American forces under a clear sky and on a smooth sea. Visibility was excellent and it was put to good use.

American planes located and made three successive attacks on *Mogami* and *Mikuma*. *Mikuma* was sunk with a loss of 1000 men but *Mogami,* almost miraculously, was able to flounder into the protection of Truk. She was out of the war for two years.

By the evening of the sixth, the lengthy action was beginning to take its toll. Admiral Spruance commenced detaching destroyers as their fuel ran low, and the carrier aviators were near exhaustion from three days of continuous operation.

He decided to turn northeast toward a refueling rendezvous and to avoid danger of an encounter with planes from Wake to which he surmised the homeless Japanese carrier aviators had flown after the loss of their floating bases.

This decision proved to be a wise one, for Yamamoto had dispatched a force of seven cruisers and eight destroyers to protect *Mogami* and *Mikuma* and to destroy the American carrier force. The Japanese and American forces would probably have met had Spruance continued his westerly course.

Yamamoto's main body was also prepared to join in the engagement, as were planes coming from the Marshalls to reinforce those on Wake.

The Japanese forces, when assembled, were formidable. All they needed was someone to shoot at. Spruance did not provide the target.

The battle was over, but Yamamoto was still not willing to give up entirely. He attempted to lure the American forces into the range of the Japanese planes on Wake Island. He almost succeeded, but Admiral Nimitz remembered in time Yamamoto's fondness for setting traps, and recalled *Enterprise* and *Hornet* to Pearl Harbor.

Like the Battle of the Coral Sea, a few weeks earlier, the Battle of Midway was entirely a contest of air power. The skillful use by the American command of intelligence and communications avoided the gropings that marked the Battle of the Coral Sea.

While the Japanese were turned back from their objective after the Battle of the Coral Sea, there was no clear-cut victory for the Americans, though one was loudly claimed in the press.

OFF THEY GO—Marine planes leave Midway airfield to defend the island base against Japanese attack.

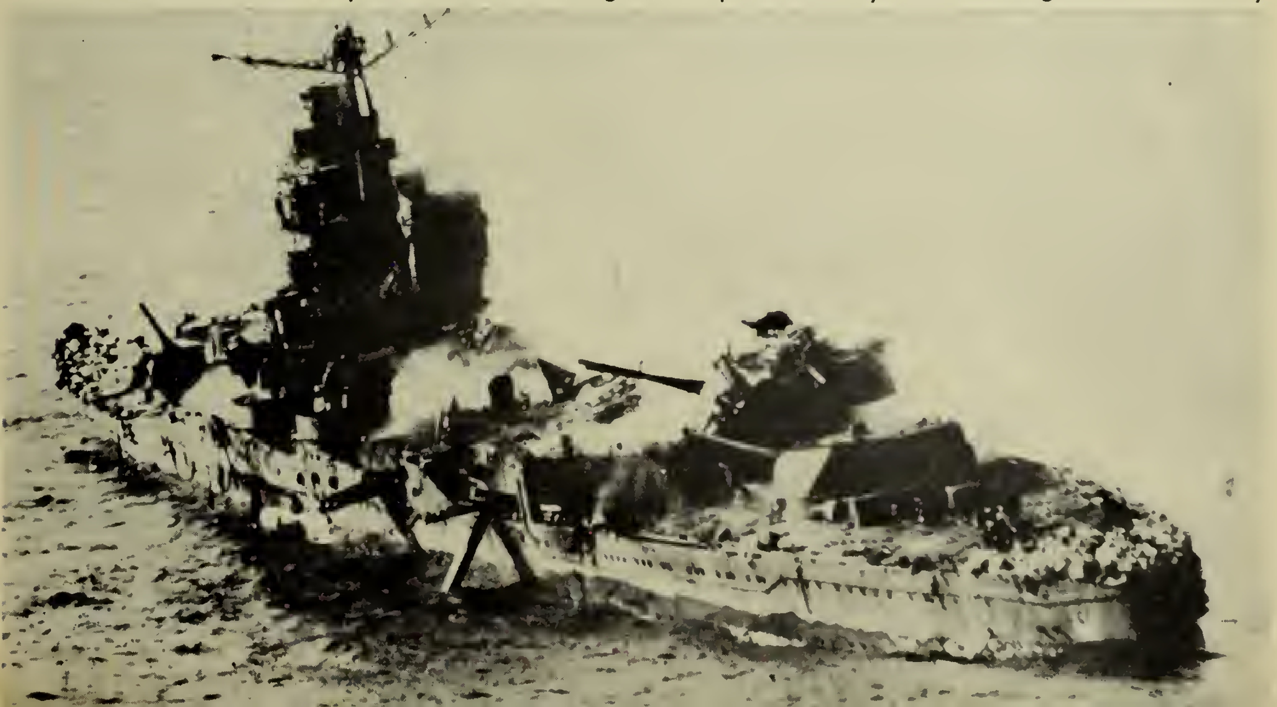
The Battle of Midway furnished Japan with its first major defeat since the 16th century. Its losses included four carriers and one heavy cruiser sunk and 253 aircraft lost. Their loss in life was an appalling 3500, including a hundred first-line pilots — a loss which Japan was to feel severely later in the war.

On the United States side of the loss ledger, there were the *Yorktown* and *Hamann* sunk and 150 planes shot down. Three hundred and seven Americans lost their lives.

Although Coral Sea was an extremely important encounter and had an effect on the Battle of Midway in depriving the Japanese of some power which could have been used to good advantage at Midway, the Battle of Midway was the turning point of the war in the Pacific.

The Japanese militarists tried to eradicate the defeat by refusing to mention it to the public. Even officials were ignorant of its magnitude. However, they could not conceal its effect from history.

DEAD DUCK—Carrier-based planes did this damage to a Japanese heavy cruiser during Battle of Midway.



TAFFRAIL TALK

Lots of men have retired on 30 years' military service. Many more undoubtedly will before history has run its course. Not too many, though, have taken the roundabout route LT Robert C. Herron, USA (Ret.), followed to achieve that status.

Ex-Chief Construction Mechanic Herron used up a total of 45 years, three wars and three different stints in the Navy to get in his 30 years' active service — and then, when the chief finally did retire, it was, as we've already noted, as a first lieutenant in the U. S. Army.

Obviously, LT Herron's path has taken more than a few turns and twists. It began back in 1917, when, fresh out of boot camp, he reported aboard the coal-burning battlewagon USS *Pennsylvania* (BB 38), then flagship of the Atlantic Fleet.

Along the way he left the Navy twice — once from 1923 to 1933 (during which time he served with the Army Reserve as a second, and later, first lieutenant) and again from 1937 to 1941. He came back to stay in 1941, however, and it was then that his long association with the Seabees began.

During those two earlier stretches of Navy duty he served (in order) in the ratings of electrician, quartermaster, radioman and machinist's mate. He was a chief machinist's mate in 1943 when he switched to chief construction mechanic.

★ ★ ★

The Antarctic is rapidly becoming so civilized that it's hardly any fun anymore. That entering wedge of one of civilization's more doubtful blessings — the billboard — has entered. Not yet in its full glory, but there are signs of its coming.

There are the somewhat adapted roadside jingles of a famous shaving cream. There is no "Kilroy was here" scribbled on bulkheads or in the snow, but you can find signs which state "Smokey the Bear says, 'Use your ashtrays,' " despite the fact that there is not a single tree on the continent.

You'll also find U. S. highway signs in the snow. At McMurdo, you may, if you wish, feel nostalgic over the sight of U. S. 80; U. S. 40; and the New Jersey Turnpike at strategic spots. To make you feel more at home, you'll also find the warnings "Help keep Antarctica green," "Keep off the grass," and "Drive carefully, school's open."

We're not the wagering type, but if we were, we would be happy to lay a small sum that when *Trieste* plunged to the bottom of the Marianas Trench, it found the warning "No fishing from pier."

★ ★ ★

Mama mia, molto bene and a delicate connoisseur-like smacking of the lips were a few of the reactions to the entry of USS *Tidewater's* cooks in the international cooking contest sponsored by the Neapolitan Press Club at Naples, Italy.

For *Tidewater's* American chefs to enter a cooking competition in a country famous for its culinary artistry took nerve.

For them to win first prize took verve, and attested to the *Tidewater* (AD 31) reputation for being a good feeder.

The winning entry was a Virginia baked ham and mashed sweet potatoes with marshmallow topping. The panel of judges received a generous first helping and asked for seconds.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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• AT RIGHT — BRIGHT-WORK — ➧ A shipfitter at work with a cutting torch is the subject of this photo taken by D. L. Perry, AN, USN, which won second place honors in the photo-of-the-month contest aboard *USS Saratoga* (CVA 60).

U. S. NAVY

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The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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• FRONT COVER: GROUND WORK—A twin jet A3J *Vigilante* all-weather attack bomber is readied for a trip skyward on the flight deck of USS *Midway* (CVA 41).

• AT LEFT: OUT FOR LAUNCH—An A3D *Skywarrior* of NATRON 5 is spotted on number one catapult as the cat crew prepares for launching during air operations on board attack carrier USS *Forrestal* (CVA 59).

• CREDIT: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

SLEDDING—Tractor pulls power plant package to site. *Rt:* Reactor core is raised from ship's hold.

SOUTH POLE GETS ATOMIC

FIFTY YEARS TO THE DAY after Roald Amundsen became the first man to reach the South Pole, two nuclear power systems arrived in Antarctica.

One was a prefabricated nuclear power plant, the other an atomic powered automatic weather station.

Some time in March, Navymen of Operation Deep Freeze at the Naval Air Facility, McMurdo Sound, were able to look at the first glow of light generated by McMurdo's $4.5 million nuclear power plant.

Called PM3A, the plant provides 1500 kilowatts of electrical power for McMurdo. The heart of the plant is a pressurized water reactor containing uranium provided by the Atomic Energy Commission.

PM3A is expected to mark the beginning of an era of unprecedented growth at McMurdo. The power plant should provide enough electrical output to meet the camp's lighting, heating and other electrical needs. It replaces the present diesel-powered generator system.

A COOL CRUISE—*USS Arneb* (AKA 56) delivered components for PM3A.

The plant should also ease the logistic problems of supporting activities in the Antarctic, since in the first two years of operation it will supply as much energy as millions of gallons of fuel oil.

In addition, nuclear power can make possible the operation of water distillation and sewage systems in the near future. This will help solve the water problems at McMurdo and provide more comfortable living for the Navymen and scientists stationed there. Until the beginning of its operation, a laborious snow melting process was the only source of water. It should also make life safer (by replacing about half of the oil-fired stoves with space heaters).

The men of Mobile Construction Battalion One did the actual work that transformed the 900-foot Observation Hill of volcanic ash and rock into PM3A's site. When the Deep Freeze summer support season began, personnel of Antarctic Support Activities, one of several Deep Freeze commands, tackled the first phase of the PM3A job — selection and preparation of a site.

Initially, tests were made along Hut Point, an elevated ridge north of the camp area, but this site proved worthless when it was found that the loose volcanic content would not support the plant's weight. Then engineers found solid bedrock a short way beneath the

SEABEES erect new power lines.

POWER

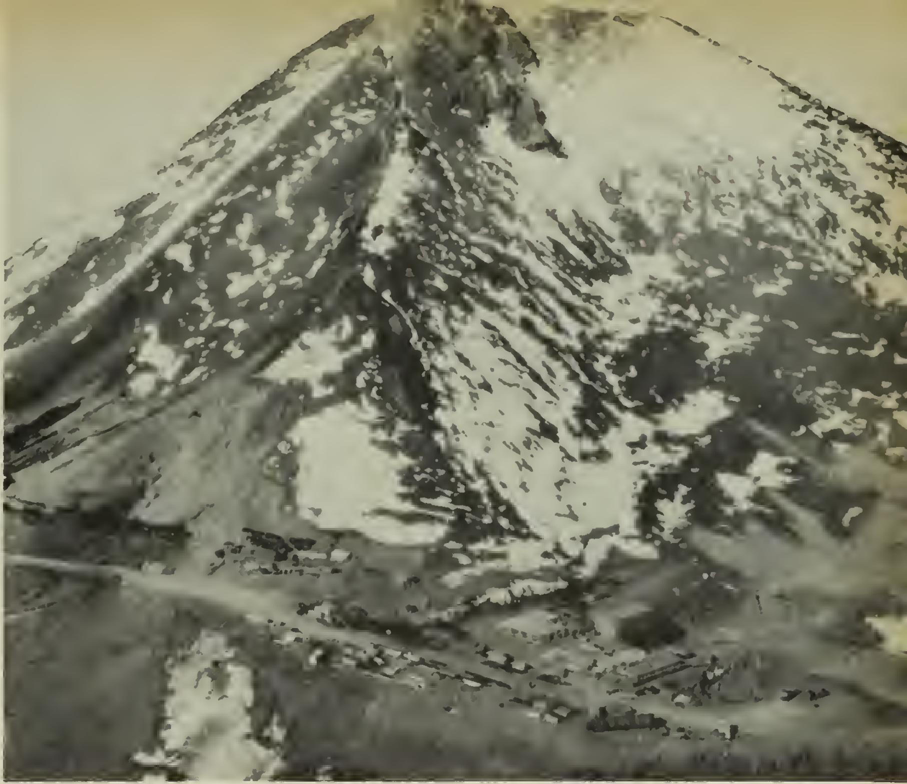
permafrost surface and subsoil of Observation Hill.

The men of ASA began the rough work; blasting a shelf-like cut in the hillside, then clearing and leveling the area. In addition, they had to make a rough niche in the hillside to partially house and shield the heart (the nuclear core) of PM3A. The Navymen who did the initial blasting of the site worked against the hard frozen surface, then had to work their way through several inches of permafrost. This, plus the bedrock beneath, made test cores difficult to obtain. Later, explosives workers were delayed in drilling innumerable holes that were to receive dynamite charges. Initial blasting and cutting saw the removal of 13,000 cubic yards of Antarctic rock. Tons more were removed to finish the site.

In addition to the uncooperative nature of Antarctic terrain, the men had to cope with weather—the cold, windy variety. The Operations Officer of the project estimated that the working efficiency of the Seabees on the job was cut nearly 30 per cent by low temperatures and the necessity for men to wear a relatively great amount of clothing.

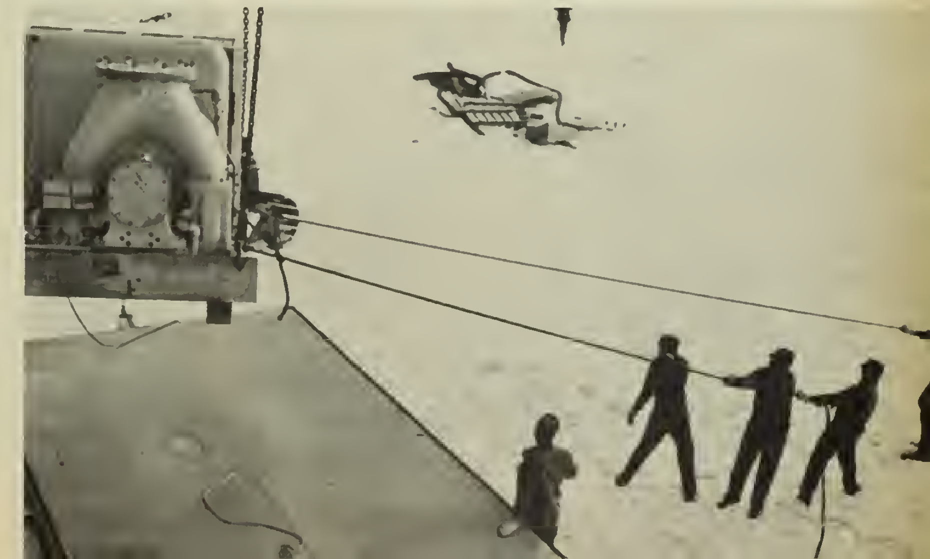
It took some 12,000 manhours to rough-prepare the site and a total of 60,000 manhours before PM3A was ready to receive its basic components.

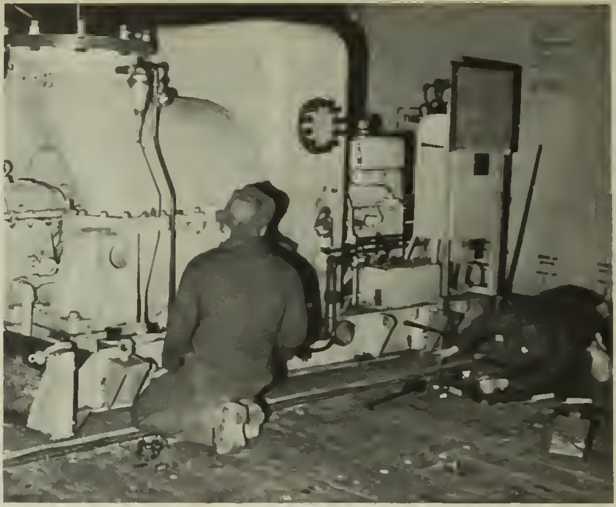
The core itself (which is about the



ON LOCATION—Nuclear power plant is located on side of Observation Hill. *Below:* Pipe for plant's shield cooling system is off-loaded onto sled.

HEAVY DUTY—Steam turbine leaves ship for trip across to power plant.





ON THE SPOT—Parts of shield cooling system and turbine are installed. *Below:* Generator's steel foundation is placed.

size of a 55-gallon drum) is made up of thin, yard-long, tubular fuel elements – about 740 in all – of highly enriched uranium. These lie in the center of a pressurized water reactor which generates about 10 million watts of thermal energy.

Water heated in the primary system by this nuclear core is pumped under high pressure into the secondary system, where the heat is exchanged and produces steam. This steam in turn powers the 1500-kilowatt generator that produces electricity for the camp.

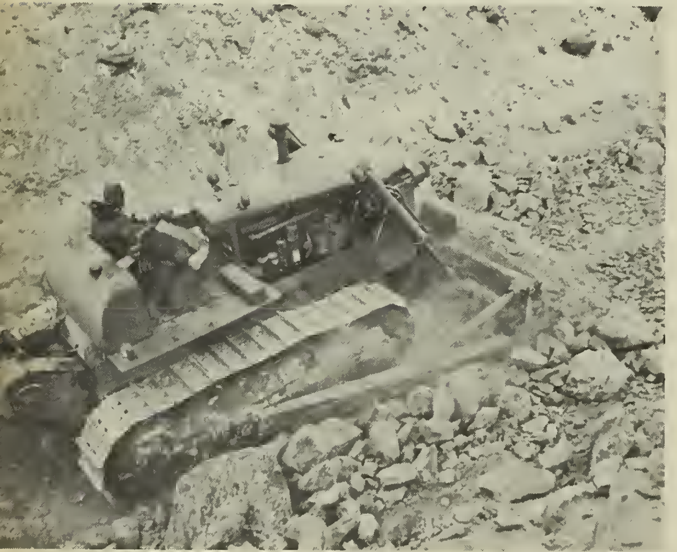
The primary system stands in vertical tanks under its buildings and falls within the special niche cut in the side of Observation Hill. Additional shielding is provided by crushed rock poured on all sides.

One of the big problems connected with the project was the transportation of the material and components that formed the plant. The major portion of the foundation and building steel came to McMurdo via ship by March 1961, and was stored near the site over the winter. This gave the project a jump on the schedule for the following summer.

The internal machinery, equipment, hardware and core arrived at McMurdo aboard USS *Arneb* (AKA 56) in mid-December, after *Arneb* followed the icebreaker USS *Glacier* (AGB 4) through the ice. The 50-odd crates and tanks which make up the reactor plant were swung over the side and loaded aboard sleds to be dragged by tractors across the sea ice to the base itself.

The plant is made up of prepackaged modules, each weighing

DIG THIS—Bad weather hindered the difficult job of cutting foundation into the rocky hillside.



POWER HOUSE—Buildings housing nuclear power plant overlooking McMurdo are of prefabricated steel.

about 15 tons and approximately 30 feet long by eight feet wide. The core is easily replaced and another can be delivered by air whenever necessary. The plant will require refueling only once every two years, if maintained at full power. It has been designed for a useful life of 20 years. Cost of the plant is approximately $4,500,000.

However, the nuclear power plant will not be the first atomic power device to be used in Antarctica. This distinction will go to a small automatic weather station located near the Little America V base.

Both the midget generator and the prefabricated reactor system were loaded aboard *Arneb* at Davisville, R. I., for the trip south. But the weather station unit arrived ready to operate while the larger power plant required some 75 days to reassemble.

The weather station generator, which is a finned cylinder only 21 inches in diameter and 19 inches high, requires no moving parts. Heat provided continuously by radioactive pellets at the center of the unit is transformed directly into electricity by thermocouples.

The entire weather station, which takes the place of earlier storage batteries which required replacement every few months, will be buried in the snow. Steel and wooden outriggers will be used to spread the weight and keep the station from sinking. Only a whip antenna and the actual sensing instruments will show on the surface of the Antarctic terrain.

Excess heat from the generator will keep the temperature of the buried electronic equipment within a constant narrow temperature range, thus avoiding the freeze-up problem which has beset battery-operated stations in the extreme Antarctic cold.

The unmanned weather station is designed to collect temperature readings, barometric pressure, wind direction and wind speed. The information is transmitted in digital form every three hours to the McMurdo Station weather service office 54 miles away, where it is correlated with data from other parts of the Antarctic in preparation of weather forecasts.

If all goes well, this nuclear unit will furnish weather data for Operation Deep Freeze for at least two years without servicing and the plant could go without the need of refueling for as long as 10 years.

PIECE BY PIECE—Prefab parts of power plant are assembled. When together they will put out 1500 kws.

McMurdo's Mechs

KEEPING MOTORIZED equipment working at McMurdo Station in Antarctica is the job of Navy mechanics of Antarctic Support Activities, part of Operation Deep Freeze.

Machines, like the men, work around the clock. The machines, however, get little if any rest; the men are broken into two shifts of 12 hours each.

Vehicles used here are of infinite variety. There are types designed primarily for use on ice and snow — weasels of World War II origin, sno-cats with their insect-look and four-tracked pontoons that provide motive power, Canadian "track trucks" of recent design — as well as a variety of more conventional truck vehicles; these latter have been pressed into service to do the heavy construction and hauling jobs of Deep Freeze.

The summer, with its slush-producing temperatures, becomes an ordeal of sorts for those vehicles designed to work in ice and snow. They hug the ground, and continued driving through puddles coats their undersides with a heavy mantle of muddy ice. Before maintenance or repair work can be done, these vehicles must be thawed out indoors.

But thawing out is only one problem. Mechanics find their greatest hindrance in the lack of parts. It is more than 12,000 miles to the United States and warehouses, so often the supply department of McMurdo Station runs short of one part or another that is needed to get a truck or weasel back into working order. Mechanics then take up torch, anvil or welding equipment to fabricate what they need; and their ingenuity under the circumstances is

SNOW CAT needs a little help getting started on cold Deep Freeze morning.

largely responsible for keeping the wheels of Deep Freeze going.

There are two garages here – one for heavy diesel equipment, the other for the lighter vehicles that are gasoline powered. Both are heated and lighted to provide as comfortable working conditions as possible at the present time.

But often machines break down in the field – on a rocky hillside, along the rugged roads of the McMurdo Sound area or out on the flat stretches of ice and snow nearby. Then mechanics of ASA must work exposed to the elements. This happens most often during the sunny summer months when the resupply of U. S. Antarctic scientific camps centers on McMurdo Station; thus, weather is not usually a great problem, though at any time of year Antarctic wind and temperatures can make the handling of tools difficult. If shelter is necessary for a job, it may be provided by an impromptu windbreak of parachute cloth to protect the workmen.

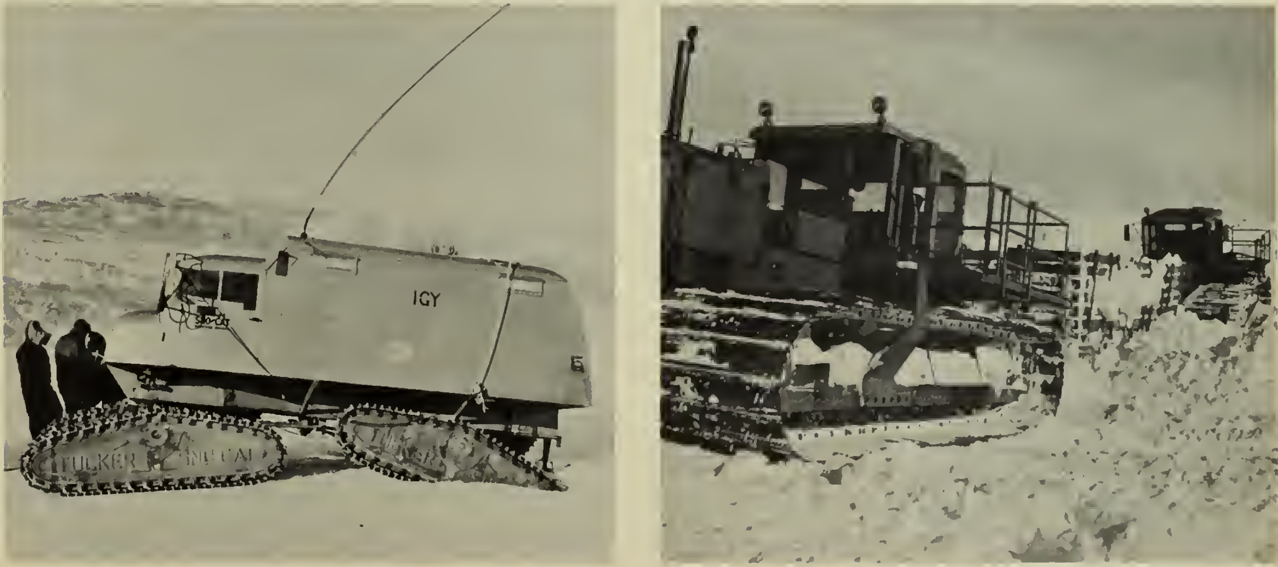
During the long winter's night, from March to late September, mechanics completely overhaul every possible piece of equipment from the simplest water pump to the multiton tractors of McMurdo. Every available vehicle must be ready to return to work as soon the next summer season begins.

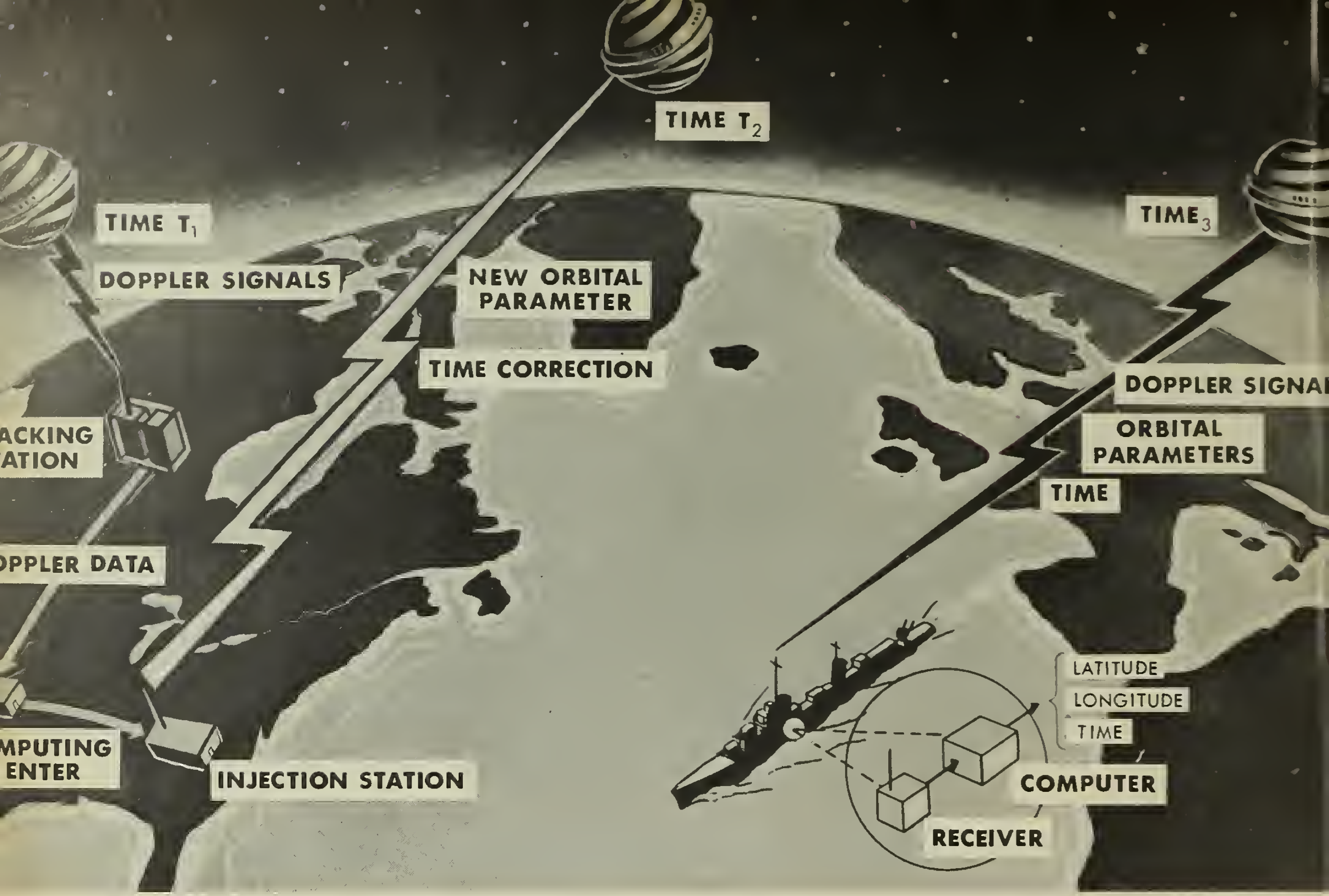
Aside from the big jobs, there are simple but annoying mechanical problems to be faced by mechanics here. Brake linings and the gaskets in their hydraulic systems are sometimes affected by the intense cold. Loss of brake fluid is common, and often a parked vehicle, because it was driven through a deep puddle in the summertime, will come up with frozen brakes. The metal and rubber tracks that drive the vehicles designed for snow frequently loosen and are thrown off; these are tedious to replace, especially when the work must be done outdoors in a foot of snow. During the mild late summer, flat tires on trucks sometimes must be changed in ankle-deep mud with the temperature just above freezing. In addition, there is the year-'round necessity to pre-heat engines for an hour or more before starting can be attempted; this preheat time is needed to make crankcase oil fluid and warm block and manifolds.

To keep emergency repairs to a minimum, McMurdo garages have adopted a system of preventive maintenance. Each vehicle is inspected at least every 30 to 40 days, checked for operating condition and safety, also tuned up, greased and cleaned of all ice and mud.

COOL WORK Seabee mechanics install a new engine in ailing tractor.

ROUGH GOING—Snow cat drops into crevasse and (right) D-8 tractors dig out sled at Little America.





Sailing by Satellite

Heft a softball in your hand. Then imagine a tiny metal cylinder filled with some 95 grams of plutonium-238, imbedded in the core of that ball.

Impressed? You have no special reason for being so—until you learn that two small, white objects only slightly larger than that softball are orbiting the earth this very minute, and that they, along with the capsules of atomic fuel they contain, represent the creation of another space gap of sorts. The gap is in our favor.

These four-and-a-half pound white balls are really thermoelectric generators. Fastened pick-a-back style to the undersides of two of the Navy's currently orbiting *Transit* navigational satellites, they are providing the power to operate some of those two satellites' transmitters. They constitute history's first successful application, by anyone, of nuclear energy as a power supply source in space.

By now you are, we hope, at least mildly interested. To get really excited, though, you have to know something about navigational satellites, what they'll mean to the Navy, and how the use of nuclear power will help them do a better job.

A still new (and as yet not fully developed) system, navigation by satellite, represents just one example of the continuing push by the Navy to harness space.

Communications satellites will provide rapid, long-range message transmission to U. S. naval forces deployed throughout the world.

The Transit system aims to overcome weather-imposed difficulties —fog and/or starless, overcast skies, for instance—which have plagued navigators for centuries. The *Transit* system is based on interpretation and measurement of a well known phenomenon—the Doppler shift. Literally, this is the apparent shift in radio wave frequency observed when the distance between the source of radiation (in *Transit's* case, the satellite) and the observer (or receiving station) is increasing or decreasing because of the motion of either or both.

The Doppler principle is an application of relative speed. You've heard doppler many times, but probably didn't know it was called doppler. For instance, when you were stopped at a railroad crossing and listened to the whistle of an express as it approached, you will remember that the note of the whistle was high as the train came near. As the train passed, the pitch of the whistle seemed to drop. And as the express went off into the distance, the pitch of the whistle was low. The change in pitch was doppler.

Application of the Doppler shift measurement technique to *Transit* is by no means that simple, of course —but the theory behind it is strikingly similar.

The amount of shift in either case is proportional to the velocity of approach or recession. Frequency shifts upward as a satellite approaches a receiving station, and shifts downward as the satellite passes and recedes. The exact amount of this shift depends upon the location of the receiving station with respect to the path of the satellite. With the exact location of the satellite established through transmission of its orbital parameters or location in space, it is possible for an earth receiving station, utilizing measurement of the shift in frequency, to calculate its own exact position.

Accuracy in the *Transit* system is obtained chiefly because of two facts.

First, the quantities measured—frequency and time—are quantities that can be easily established with great accuracy.

Second, the satellite is very precisely restricted by Newton's laws of motion. A satellite is really a small planet, moving precisely under the gravitational pull of the earth. Of all the possible satellite paths permitted by Newton's laws, there is only one which will result in any one particular curve of Doppler shift. Accordingly, from this particular curve the position of a satellite with respect to the receiving station at any one time can be easily and precisely determined.

AN ENTIRE *Transit* operational system consists of five groups of equipment: Several satellites; a network of tracking or receiving stations; a computing center; an injection station; and shipboard navigational receiving equipment.

Here's how it works.

Satellites will travel in polar orbits at the highest altitudes still allowing for accurate tracking—probably around 600 nautical miles up. Tracking stations will receive and record Doppler shifts radiated by each satellite on any pass within receiving range.

This information will be corrected for refraction (the bending effect on radio waves, exerted by the ionosphere) and the resulting Doppler data will then be transmitted to the computing center in digital form. The computing center will use this data to calculate orbital parameters (satellite locations in space corresponding to specific and sequential time increments) of the satellites for at least 24 hours in advance, and will transmit this information to the injection station.

The injection station will transmit all such orbital data to each satellite twice a day as it passes within range. These signals will first erase the satellite's memory tape, then read in new parameters and time correction. Each satellite will retransmit this new data at two minute intervals as modulation of the two stable frequencies.

Navigational equipment aboard ships will, in turn, receive and record the Doppler shift of each of the satellite frequencies. It will also record the orbital information transmitted by the satellite. Using all of this data, together with the accurate time signals broadcast by the satellite, the navigator will be able to compute his latitude and longitude as a function of time.

The new system will insure accurate, reliable, 'round-the-clock, *all-weather* navigation – something impossible to achieve with current or previously used methods.

TRANSIT GOT ITS START back in 1958 under the direction of ARPA (Advanced Research Projects Agency). Initial stages of the program under that agency were concerned primarily with establishing feasibility of the system. Then, in May 1960, management of the program was transferred to the Navy's Bureau of Naval Weapons. CNO told BuWeps to "develop a satellite system to provide accurate, all-weather, world-wide navigation for naval surface ships, aircraft and submarines." First steps under BuWeps' auspices included the development of an engineering prototype of the operational system, and of navigational receiving gear.

In the several stages of research and development since that time, BuWeps has put into orbit a total of five experimental satellites as part of the *Transit* program. All of the shots thus far have been launched from Cape Canaveral, but future launchings of the operational vehicles will probably originate from the Pacific Missile Range facilities at Point Arguello, Calif., from whence the satellites will be boosted into polar orbits.

In the fully operational configuration, the *Transit* system will contain a minimum of four satellites circling the globe in evenly spaced (in longitude) polar orbits. With them the Navy expects to be able to guarantee navigational fixes at almost any spot in the world at least once every 108 minutes, and in many locations two to four times as often. Satellite replenishment, either to replace a dying satellite, or to fill a developing gap in world-wide coverage, is expected to require the launching of a new vehicle approximately once a year, when a satellite life of five years is achieved.

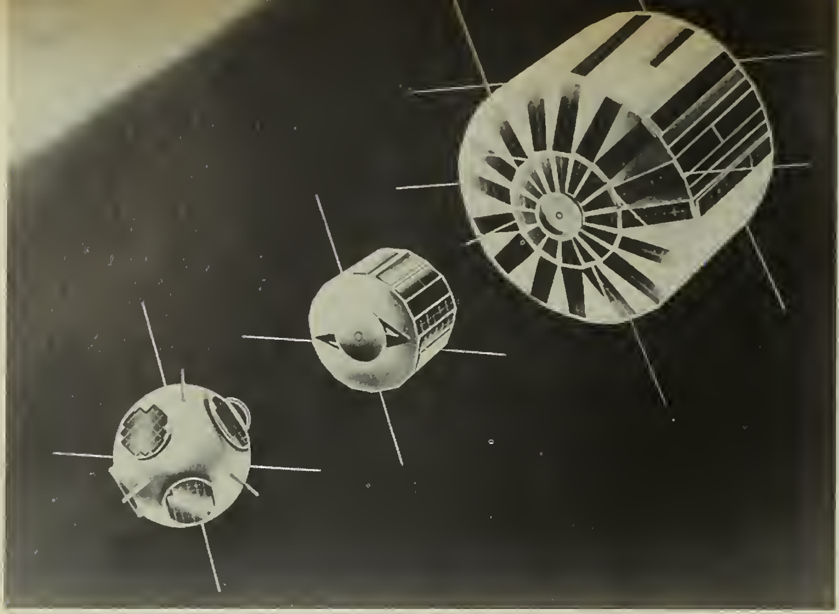
ON THE BALL — Striped bands around *Transit-I* act as antenna.

So much, for now, for the *Transit* navigational system and the satellites themselves. What about those little white balls we mentioned back at the beginning of this article?

We've already pointed out that the *Transit* satellites transmit signals continuously as they orbit the earth. It doesn't take an electrical or electronics genius to figure out that the power to operate this transmitting equipment must be furnished by some system of batteries and/or generators.

It is obvious, too, that if the sat-

AT SEA — Satellite system will enable ships to pinpoint their location in any kind of weather.



GOOD GROUP—*Transit* IV-A (rt.) went into orbit with two satellites.

ellite navigational system is to be functional, the satellite's ability to transmit signals must be completely reliable and long lasting.

A design objective for *Transit* satellites is a useful life of five years—a development which will drastically reduce the over-all cost of the program. One recognized problem associated with the attainment of five-year satellite life is the selection of a power source that will provide electrical energy for that period.

This power source, in addition to the obvious requirements of reliable operation over a long period of time, must be lightweight, relatively economical to produce, and readily integrated into the *Transit* satellite design. This may appear to be a tall order or challenge, which in fact it is; however, considerable progress is being made and this problem is by no means an insurmountable one.

THE CONVENTIONAL power source currently incorporated in the *Transit* satellites consists of nickel-cadmium storage batteries and solar cells which charge the batteries when the satellite is in a period of exposure to sunlight. As a measure of progress being made with this type of power supply, it is significant to note that the *Transit 4A* satellite, launched into orbit on 29 Jun 1961, is still transmitting signals which are powered by storage batteries and solar cells.

The satisfactory performance of this power source is past one year, and there are no indications that the end is in sight.

In contrast, a similar, but earlier, design power supply incorporated in the *Transit 2A* satellite, which was launched on 21 Jun 1960 (or about one year earlier than the 4A satellite), suffered a malfunction after approximately four months in orbit when the nickel cadmium batteries failed as the result of overcharging.

Although significant and gratifying progress is being made in the development of improved storage battery/solar cell type of power supplies, alternate types of power are also being investigated as an integral part of the *Transit* satellite research and development program. Those little white balls containing nuclear power (thermoelectric) for the orbiting *Transit* satellites represent the initial step towards evaluating the present and potential capability of nuclear power as an energy source to sustain the life of *Transit* satellites over a five-year time span.

THE NUCLEAR POWER SUPPLY or SNAP (Systems for Nuclear Auxiliary Power) is a development of the Atomic Energy Commission. The specific application of SNAP units to the *Transit* satellite came into being as the result of joint AEC and Navy studies which concluded that such an application was technically feasible.

In order to prove this feasibility, formal agreements were established between the AEC and Department of Defense whereby the AEC provided two SNAP units (designated SNAP-3A) to the Navy for installation and test as secondary experiments on selected *Transit* satellites.

The results of this joint effort are history; the SNAP-3A units were launched into orbit on the experimental *Transit* 4A and 4B satellites on 29 Jun 1961 and 15 Nov 1961, respectively. Both units continue to perform satisfactorily, confirming the technical feasibility of utilizing nuclear power supplies in space application.

Following up the initial and signal success of the SNAP-3A program, the AEC and Navy are proceeding on a joint program towards evaluating more powerful SNAP units on *Transit* satellites which will be representative of the operational design in terms of size, weight, thermal balance and power requirements.

The Navy's *Transit* program, although the first user, is not the only space system to which the application of nuclear power is being actively pursued. For this reason, a brief background on the AEC's program for the development of a family of SNAP generators may be helpful at this point.

The AEC initiated their SNAP program in August 1955 in response to a Department of Defense request for a study and limited experimental work toward development of an atomic reactor auxiliary power supply for an Air Force satellite system that had been under study.

As it has evolved since that time, the development of SNAP has branched off into two different forms.

Odd-numbered SNAP projects (SNAP-1, SNAP-3, etc.) have been directed toward the development of compact atomic-electric power packages, utilizing the conversion of radioactive-decay heat to electricity—radioisotope generators similar to the type currently in orbit on *Transit* satellites.

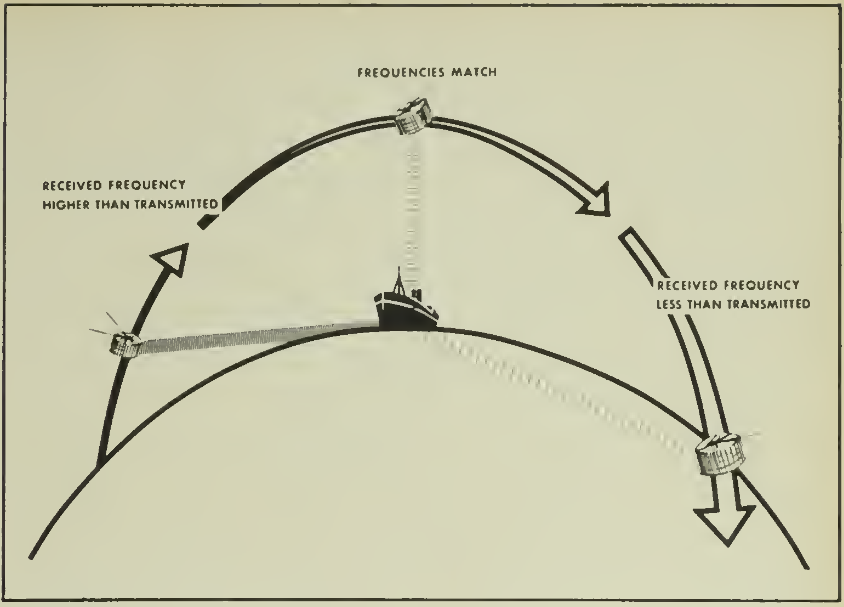
Even-numbered projects (SNAP-2, SNAP-4, etc.), on the other hand, are concerned with the more familiar atomic reactors which convert fission of nuclear materials into power. These SNAP projects have brought forth a whole new technology on the use of nuclear material as a unique and enduring source of power for space, land and underseas applications.

HOWEVER, it is the radioisotope generators—those little white balls again—that we want to talk about here.

Working under a subcontract, a commercial outfit produced a proof-of-principle model of a radioisotope generator by December 1958. The first demonstration model was fueled with polonium. It produced 2.5 watts of electricity, and was unveiled to the nation by then-President Eisenhower in January 1959 as the "SNAP-3 atomic battery."

For the *Transit* generators, however, the AEC decided to switch to plutonium-238 as its fuel supply.

For one thing, plutonium-238 has a very long half-life (the amount of time it takes for the fuel to drop 50 per cent in its load output of heat) and was therefore considered much more suitable for the five-year design objective for *Transit* satellites. Furthermore, the low radiation levels involved in working with this isotope simplify ground handling and testing.


FREQUENCIES MATCH
RECEIVED FREQUENCY HIGHER THAN TRANSMITTED
RECEIVED FREQUENCY LESS THAN TRANSMITTED

DOPPLER EFFECT is illustrated in diagram that shows the change in frequency that occurs as the navigational satellites pass a ship.

THE THEORY OF OPERATION of these generators is relatively simple. Here's how it works.

The hot junction of the generator is maintained at a very high temperature through the heating effect of the decaying radioisotope. The temperature at the cold junction, located just inside the outer shell of the generator, is only slightly higher than the temperature of the outer surface, kept relatively cool by radiation of the heat into space. This difference in temperature from the inside to the outside of the generator causes a potential to exist across the thermoelectric elements. Current flows, and power is produced, when a load is connected across the generator terminals.

The generator radiates its heat into space through an outer shell that is coated with a thick thermal covering. This resists absorbing of the sun's rays and maintains the temperature on the outer surface at approximately 200 degrees F. The difference between this and the temperature at the hot junction generates about 2.7 watts of electricity.

Keep in mind, however, if that doesn't sound like an impressive amount, that the generators which have thus far been put into orbit have been experimental models.

Now then, does the idea of very-much-alive radioactive material bunging around in space bug you a little? And what about the possibility of an accident on the launching pad?

YOU NEEDN'T WORRY. In the first place, plutonium-238 is identical chemically to other isotopes of plutonium, but its atomic characteristics are much different. It cannot, for example, support a chain reaction—even in large masses it presents no danger of an atomic explosion.

All forms of plutonium are poisonous if inhaled by living organisms. SNAP safety tests conducted by the AEC to prove the absolute integrity of the tiny metal cores which contain the isotope are among the most elaborate and exhaustive staged anywhere.

AEC has designed these fuel capsules to survive fire, explosion and impact safely, and to burn up in the atmosphere when a satellite ultimately reenters from orbit.

ON EARTH—Navyman checks info received at Point Mugu over the *Transit* Data Transmission system.

The isotope capsules in *Transit* have withstood this type of punishment and to prove their worth, AEC has burned kerosene and nitric acid over them, subjecting them to temperatures as high as 5100 degrees Fahrenheit; exploded 1650 pounds of TNT around them, belting them with shock pressure of approximately 1000 pounds per square inch; and slammed them at high speeds against a granite wall. Even the lowest-grade aluminum core tested withstood this punishment and more.

Since radioisotopic generators are still in the experimental stage, and since the *Transit* satellites' electronic components require more power than the generator alone can supply, *Transit* satellites will continue to rely on the system of storage batteries and solar cells as the primary power source. However, with the current effort on the development of more powerful radioisotope generators, the day may come when these generators will supply all of the necessary electrical power for the *Transit* navigational satellite system.

One thing's certain. If you're involved in navigation in any way, you'll soon be helping to plot courses and establish positions with the help of an unseen satellite. It's a cinch that we and many future generations of Navymen, as well as other mariners the world over, will be affected by the Navy's *Transit* efforts in the field of space-aided navigation.

—Jerry McConnell, JO1, USN.

'YESTERDAY'—Amphibious landing on Pacific island of Peleliu typifies many made during World War II.

BEACHHEAD NAVY

A glance at almost any map is sufficient to show that an army marching far enough in a given direction will eventually reach a body of water which must be crossed. When that body of water is crossed, there may be an enemy on the other side—who has to be fought, and defeated.

Down through the centuries, marching armies—some led by tyrants, others by liberators—have reached the edges of the ocean.

Alexander the Great, Julius Caesar, William of Normandy, Napoleon, Hitler and a host of others marched their armies to the point where land ended and the sea began.

All found themselves in a position in which their forces took to the water (or they ought to have), reached land after the water was crossed and fought against an enemy who was secure behind his fortifications, had plenty of ammunition to shoot up and no supply lines to maintain. In short, the invaders' forces had to imitate animals who are as agile in water as on land. They had to become amphibious.

A commander's success was usually measured in his ability to make his forces amphibious. Alexander the Great revealed himself a master at amphibious operations when his ships approached the walls of ancient Tyre, defeated the enemy ships and launched a catapult attack which breached the city's formidable walls.

Julius Caesar landed troops in Britain despite the spears of defending tribesmen and was rewarded with token success. It remained for later Romans, however, to secure the conquest.

William the Conqueror landed his forces in England in September 1066. He established his beachhead in typical Norse fashion and provoked the English King Harold into attacking just a few miles from the

A BEGINNING—Troops hit the beach from Navy boats in 1940 exercise.

'TODAY'—Seabees' heavy equipment rolls ashore during a practice landing.

channel at Hastings. The resulting defeat of King Harold was so significant its effects are felt even today.

Had Napoleon and Hitler possessed the imagination and audacity to launch amphibious attacks against England, there is little doubt history would have been considerably altered, whether or not they succeeded.

The allies had both the imagination and audacity to launch amphibious attacks in Africa, Europe and the Pacific during World War II, and they won that war largely because of their amphibious ability.

Since amphibious assault is a technique in which the attacker begins his operations on the water, carries the attack to the shore and steps ashore almost literally under the weapons of the defenders, the technique was difficult enough to master in the days of swords and spears. When technology began to complicate warfare, and the attackers found themselves looking down the muzzles of firearms, amphibious assault seemed to be risky to say the least.

In spite of the risk imposed by the technology of the day, the United States employed amphibious assault during the Mexican War in such a way as to serve as a model in later years. Nothing was left to the imagination.

Commodore David Conner landed troops on Sacrificios Island, Mexico (a few miles from Vera Cruz) in 1847. The organization of the landing was excellent and the operation went off like clockwork.

Because of unexpected political developments in Mexico, the landing was unopposed. However, had it been opposed, it would almost certainly have encountered the same success it met under the circumstances.

During World War I, the British decided upon an amphibious attack against an entrenched enemy. The place was the Gallipoli Peninsula on the Dardanelles. The object was to take Constantinople. The attack failed for a number of reasons, one of which was a complete lack of surprise. The long range effect of this failure was to place the technique of amphibious assault in considerable disrepute in subsequent military thinking.

Although there was scarcely a government in the world willing to spend any money on the development of amphibious forces following World War I, there were quite a few people in the United States Navy and Marine Corps thinking about amphibious techniques and developing theories.

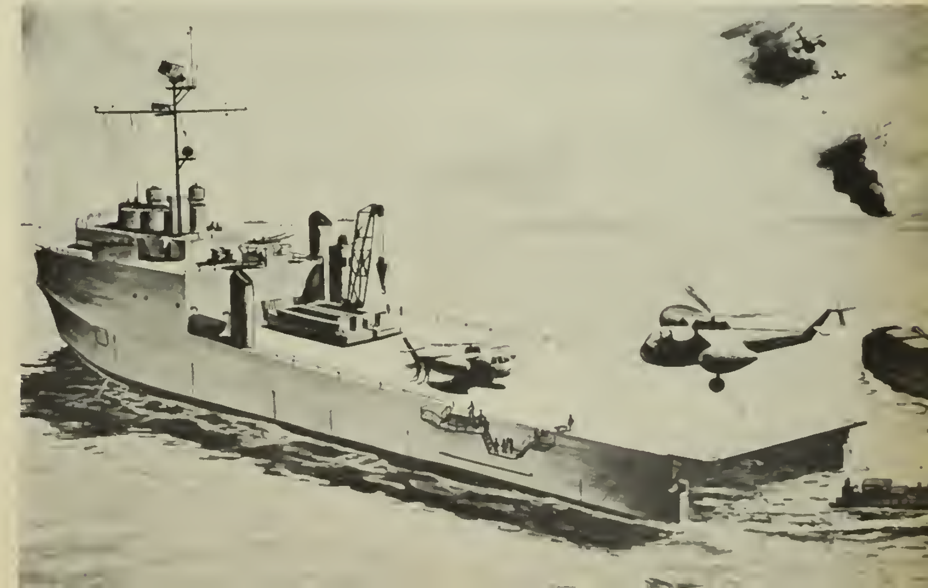
In 1927, these theories were given a workout with the U.S. Marines in Nicaragua. The Leathernecks employed lightly armed, small-unit infantry teams which became the model upon which the Corps built its amphibious assault forces in World War II.

In Nicaragua, the Marines learned the value of close cooperation between ground and air elements. Guerrillas were spotted from the air; ground patrols were warned of their presence and were able to wipe out would-be ambushers. There were also times when air bombing and strafing helped ground units dispose of numerically superior guerrillas.

It was Marine experience in Nicaragua, together with an extensive use of published works and directives, plus heavy reliance upon 40 years of amphibious experimentation by the naval service, which resulted in the 1934 publication of the Marine Corps' *Tentative Manual for Landing Operations.*

The authors of this manual divided amphibious doctrine into six elements—command relationships, naval gun-

'TOMORROW'—Amphib transport dock combines functions of AKA and APA.



UP AND AT 'EM—Marines board helicopters on flight deck of carrier to make vertical envelopment of 'enemy' during amphibious maneuvers.

fire support, aerial support, ship-to-shore movement, securing the beachhead and logistics.

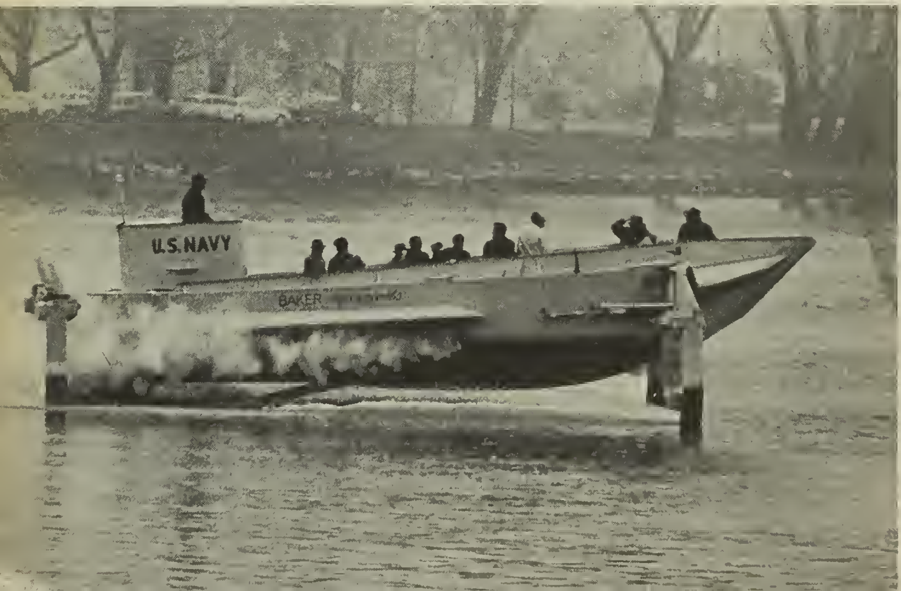
IT WASN'T UNTIL FEBRUARY 1942, however, that the amphibious forces were really in business. This was when President Roosevelt, after deliberation with Prime Minister Churchill and a hand-picked staff of advisors, ordered the Atlantic and Pacific Fleets to create amphibious forces in each Fleet capable of landing troops anywhere in the world.

It was appropriate that Winston Churchill should be a party to the United States entry into the amphibious field, because he was one of the few statesmen in the west who, after Gallipoli, still believed amphibious operations could be employed to advantage. It might also be noted the Japanese were conducting some rather successful amphibious operations in the Pacific during the early stages of the war.

It was not until well along in the war that President Roosevelt revealed the development of an amphibious landing craft. He termed it a "wholly new type of ship we didn't dream of two years and a half ago."

The new ship turned out to be a flat-bottomed, motor-propelled vessel which would carry landing troops to the shore at a medium speed. It was capable of transporting weapons simultaneously or, at least, getting them on the beach soon after personnel. Its effect was to free invading forces from the immediate necessity for port facilities and to place them on a more nearly equal footing with the dug-in defenders.

NEW LOOK—New Navy landing craft with retractable hydrofoil takes a test run. The LCVP(H) is capable of speeds in excess of 35 knots.



ONE OF THE LARGEST and first of the new landing craft to be developed was the LST (Landing Ship Tank) which was also called, with something less than affection, the "large slow target."

It displaced 5500 tons when loaded, and it could carry AA equipment, tanks, trucks, bulldozers and other heavy machines. Such a craft could, if need be, transport a landing force from an American port to any overseas landing beach.

The next development in landing craft was the LSM (Landing Ship Medium) which was first used in the Normandy landings. It was designed to complement the LCI (Landing Craft Infantry) and put tanks ashore immediately following the infantry.

Also evolved about this time was the LCT (Landing Craft Tank), a highly maneuverable corvette-sized craft of shallow draft, capable of transoceanic navigation.

Other major landing craft making their appearance in this era were the LCVP (Landing Craft, Vehicle, Personnel) and the LCV (Landing Craft, Vehicle) used for transporting infantry and small vehicles, such as jeeps and light tanks, from ship to shore.

The LCM(3) (Landing Craft, Mechanized—Mark III) was used to land bulldozers, medium tanks and other equipment in this weight class.

In addition to these landing craft, truly amphibious vehicles were developed, such as the LVT (Landing Vehicle, Tracked), which was made in both armored and unarmored versions.

There was also the DUKW which had no fluke-like tracks or treads to propel it in the water, as did the LVTs. Rather, it traversed the land on wheels and was screw-propelled in water.

IN THE PACIFIC, the Japanese had planned a war of attrition by placing heavily fortified positions on key islands. thus expecting to make the cost of taking the islands (which they had no hope of keeping in-

LEBANON LANDING—Fast-moving amphibious forces have stopped many a flare-up in the Cold War.

definitely) so high the American public would demand peace.

These plans were defeated by the system of island hopping adopted by the United States forces, which had learned that "hitting the enemy where he ain't is about as important as hitting him where he is."

There were some islands which could not be bypassed. Tarawa was one of them. A combination of winds, currents and tides (the phenomenon known as "dodging tides") had shallowed the water covering the offshore coral reefs to such an extent that even landing craft could not clear them. Troops had to be transferred to tracked landing vehicles to continue the trip to the beach, where a sea wall caused a great deal of additional trouble. The element of surprise, upon which amphibious operations depend heavily, was completely lost.

One lesson learned at Tarawa which had a bearing on amphibious forces, was that natural phenomena and other obstacles could sometimes be as formidable as enemy fortifications. After this, Navy frogmen were used extensively to scout the approaches of Navy landing craft.

Another lesson re-emphasized the importance of having enough naval gunfire support on hand to do the job.

The landings of Allied troops in North Africa, Sicily and Italy are more or less familiar history. Many of the lessons here were learned by the Germans and Italians, who underestimated the Allies' ability to land when and where they did.

THE GREAT NORMANDY beachhead was something the world had never seen before nor is it likely to see anything exactly like it again. Although large concentrations of manpower may still be necessary to defeat an enemy in the nuclear age, landing operations now require different phasing.

From an organization which, for all practical purposes sprang into existence during the Second World War, the amphibs have developed into a force in readiness which is ever present. Their most memorable exploit since World War II was the landing at Inchon.

In 1958, the Navy and Marine Corps function was defined in part as organizing and equipping forces to conduct prompt and sustained operations at sea. Amphibious forces fit into this. During peacetime, they can keep a potential enemy from acquiring more territory and can help bolster friendly governments against subversion from within.

AMPHIBS HAVE SEVERAL distinct advantages. Needing no foreign bases, they are "rent free" and can be deployed off any potential trouble spot without committing the United States either militarily or politically.

Amphibious forces carry their assault equipment with them, thus making long supply lines less important. Their composition can be varied to provide balanced fighting units in any tactical situation, and they can draw from all parts of the Fleet without detracting from the Fleet's ability to cope with a general war situation.

When tactical atomic weapons

AMPHIBIOUS Assault ship USS Valley Forge (LPH 8) cruises Pacific.

came into being, many thought the death knell of amphibious forces had been tolled. To be sure, nuclear weapons presented difficulties but, in the end, tactics were developed which, like a lever and fulcrum, turned the weight of nuclear weapons to the advantage of the amphibious forces.

One of the latest developments in amphibious warfare is the concept of vertical envelopment, in which helicopter-borne Marines land behind enemy fortifications on the beach to give the enemy that surrounded feeling which became so familiar to American jungle fighters during World War II.

Helicopter-borne forces can also be landed in small groups; assemble; conduct anti-guerrilla operations, disperse quickly and regroup.

THE CONCEPT OF vertical envelopment has given birth to a new type of amphibious vessel—the amphibious assault ship. It can operate as many as 30 helicopters and carries up to 2000 troops, plus 81,000 cubic feet of cargo, for which it has the most modern equipment for rapid unloading.

USS *Iwo Jima* (LPH 2) was the first ship to be built from the keel up as an amphibious assault ship. Heretofore, *Essex* class aircraft carriers had been converted to serve the purpose. *Iwo Jima* is capable of a speed of 20 knots, which is the minimum speed at which the amphibious forces aim.

Underwater demolition teams, used since Tarawa to scout sub-surface approaches for landing craft, have been expanded to include units which are specialists in covert anti-guerrilla operations.

There are, in addition, the old reliable standbys who are necessary to make an amphibious operation a success—such as the Seabees, causeway tender units and other personnel necessary to prepare a beachhead for fast unloading once the assault phase is over.

DEVELOPMENT OF NEW AMPHIBIOUS craft has not been static since the Second World War. In addition to *Iwo Jima* and her sister ships, other type vessels are either in production, soon to be produced or in the experimental stage.

Some use the principles of the hydrofoil and hydrokeel and employ exotic methods of propulsion. Others are true amphibians which operate on land as well as on the water. The result will be greater safety to personnel, and the development of vessels and vehicles which can carry heavy payloads at high speeds anywhere.

There is no doubt that the amphibs are an alive organization. A quick review of headline highlights during the last 20 years makes this apparent.

What one doesn't always realize after the headlines are read is that these forces, which are constantly exercising and on the alert within striking distance of the world's trouble spots, are potential indigestion to any would-be conqueror who would nibble the free world to death.

The news since World War II is replete with stories of crises which have not been permitted to develop, because of the active intervention of amphibious forces. It is interesting to speculate on how many other crises did not come to a head simply because amphibious forces were nearby.

—Robert Neil.

BIG JOB AHEAD—LCIs move across English Channel for D-Day invasion of the coast of Normandy.

GOOD TIMES — Orphans get sweet treats and cartoons during visit.

Road to Rangoon

STANDING MAJESTICALLY in the early morning light is the Shwe Dagon Pagoda. Its towering spire of gold reaches 326 feet above the ground.

This was the first sight the American sailors on board USS *Higbee* (DDR 86) saw as they neared Rangoon, Burma, and the Seventh Fleet destroyer made port for a four-day good will visit.

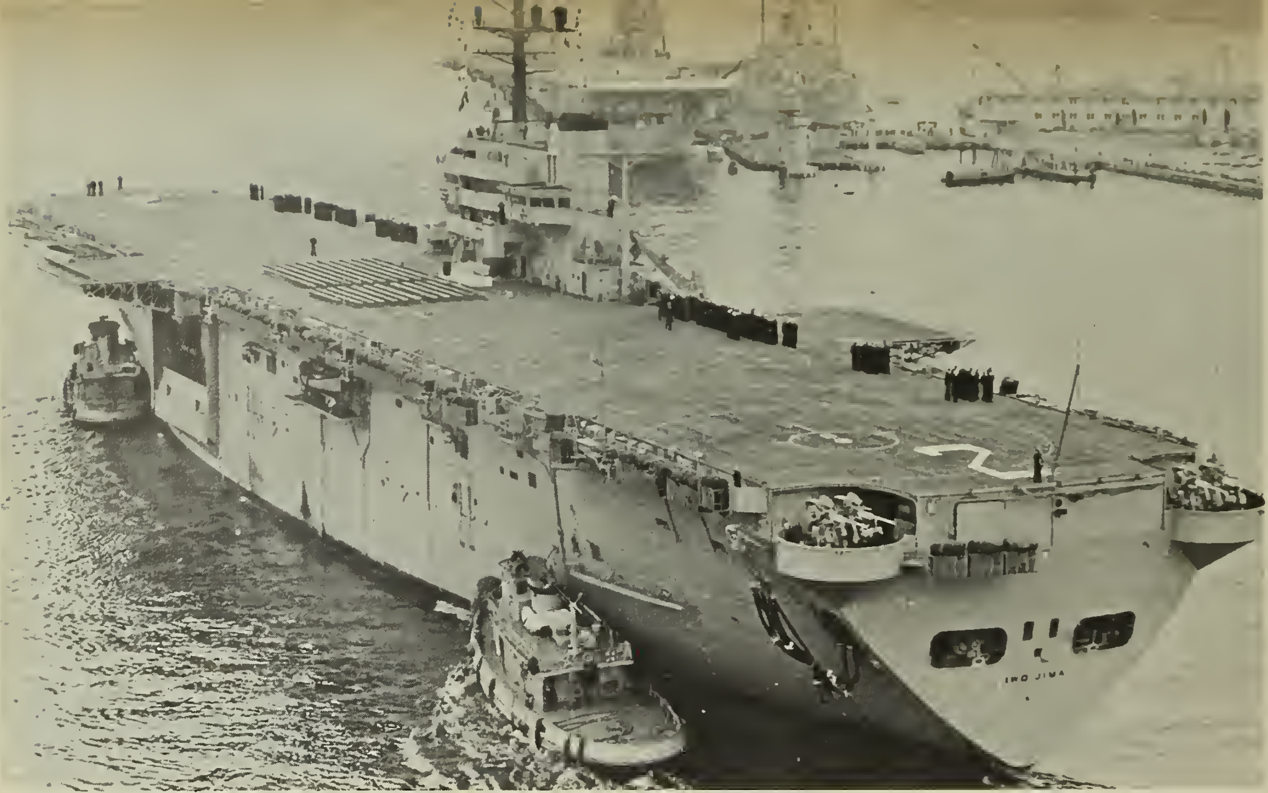
The Shwe Dagon has been a famous attraction for tourists ever since its construction more than 2500 years ago. It is said that sealed in the center of the pagoda are relics of Buddha. It was apparent at first sight, as *Higbee* made her way against the strong current of the Rangoon River, that the picturesque city would make a most interesting liberty port. It was the first trip to Rangoon for all hands and the destroyermen were eager to grab their cameras and see the sights.

The Navymen aimed their cameras at such Far Eastern wonders as the Shwe Dagon and Sule Pagoda, the latter according to legend was built to enshrine a hair from Buddha's head.

During USS *Higbee's* four-day stay more than 10,000 visitors toured the destroyer. Some waited hours for the opportunity. As they toured the ship, crew members acted as guides, explaining the functions of the destroyer and the part it plays with the U.S. Seventh Fleet. Among the visitors were members of foreign diplomatic corps and their families, Boy and Girl Scouts, orphans, Buddhist monks and civic and military leaders, as well as the general public.

GOLDEN VIEW — Spire of Shwe Dagon Pagoda was target for many cameras during visit to Rangoon.

DESTROYERMEN of USS *Higbee* made new friends in Burma. *Above:* Native dancers greet Navy visitors.



A NEW ONE—USS *Iwo Jima* (LPH 2) is first to be built from keel up as an amphibious assault ship.

Vertical Envelopment

THE VERTICAL ENVELOPMENT arm of the Pacific Fleet has been beefed up by the amphibious assault ships USS *Valley Forge* and *Iwo Jima.* Both ships were recently assigned to the Pacific Amphibious Force, which is headquartered in San Diego, Calif. *Iwo Jima* operates out of San Diego; *Valley Forge* is based in Long Beach, joining USS *Princeton* (LPH 5), a onetime *Essex*-class CVS which has been operating with PHIBPAC for more than three years.

Iwo Jima and *Valley Forge* brought new muscle to the Pacific. *Iwo Jima* is a new ship; *Valley Forge*, like *Princeton*, is an oldtimer with a new look.

Iwo Jima, commissioned in Bremerton, Wash., last August, is the Navy's first ship constructed from the keel up as an LPH. It has been said she represents the total of Navy progress in the development of the tools and techniques of vertical envelopment.

Iwo Jima is well fitted for her role.

NEW DUTY—USS *Valley Forge* has joined PHIBPAC as an LPH. *Rt.*: Copters from LPH 8 make landing ashore.

Amphib Assault Ships

Amphibious assault ships which handle the transport helicopters developed in recent years are the backbone of the concept in amphibious assault known as vertical envelopment. The idea of vertical envelopment is to augment the over-the-beach amphibious assault forces with Marines flown by helicopters to the rear and flanks of enemy strongholds. This results in the complete "envelopment" of the enemy forces.

Vertical envelopment operations can be handled by amphibious assault ships like the Pacific Fleet's USS *Iwo Jima* (LPH 2), *Princeton* (LPH 5) and *Valley Forge* (LPH 8). These ships carry as many as 40 transport-type whirlybirds and 2000 battle-equipped Marines.

She can carry 30 to 40 troop helicopters, and has sufficient berthing and messing facilities for 2000 Marines. (For a transport, *Iwo Jima's* troop compartments are unusual. Hi-fi music is piped to each; bunks have individual reading lights.) The quarters have been carefully engineered for comfort, speed and efficiency, with special rooms for stowing barracks bags and extra wide passageways for equipment laden troops.

The normal working complement of *Iwo Jima* numbers about 565; 60 officers and 505 enlisted men.

One of *Iwo Jima's* first functions as an active Fleet unit was a show cruise off California, during which she displayed her capabilities to 100 San Diego citizens. Helicopters sped combat-equipped troops and supplies from the ship to "battle" zones behind a simulated beachhead. One of the observers was Lieutenant General Harry Schmidt, USMC (Ret.), who commanded the three Marine divisions which assaulted the island of Iwo Jima during one of the World War II's most sanguinary battles. The ship's name commemorates that battle.

Valley Forge, named for the Revolutionary War winter encampment in Pennsylvania, is a "makeshift" LPH. She was originally commissioned an *Essex*-class carrier (CVS 45) in 1946. *Valley Forge* was a Pacific regular from 1948 through the action years of Korea, after which she was assigned to duty in the Atlantic. Her conversion to LPH was completed in Norfolk, Va., last July. The ship can carry 1650 troops and 40 helicopters.

At all times either *Princeton*, *Valley Forge*, or *Iwo Jima* is on station in the Western Pacific, ready for action with the 7th Fleet. The LPH is the backbone of a Special Landing Force which includes an APA and an LSD, both of which are also loaded with battle-ready Marines and their equipment. The recent Communist threat to Thailand brought *Valley Forge* with an APA, USS *Navarro*, and an LSD, USS *Point Defiance* into Bangkok where Marines of the Special Landing Force Afloat were put ashore.

PHIBPAC has increased strength with the assignment of amphibious assault ships *USS Iwo Jima* and *USS Valley Forge* to the force.

OFF THEY GO—Troops on board *Valley Forge* and *Iwo Jima* board copters to land behind shore line.

MEET THE 'ACDUTRA

A PAPER NAVY, manned by phantom Naval Reservists, was put into action recently by members of Reserve Mobilization Team 3-8, Freeport, N.Y., as they took part in their annual ACDUTRA—active duty for training.

The Mobilization Team, training at the New York Naval Shipyard, conducted mock mobilization exercises that completely staffed an invisible Navy with invisible Reservists.

Imaginary cruisers, aircraft carriers, hospitals, jet fighters—even a shore patrol unit—were manned by Reservists who weren't really there. The make-believe mobilization was a test of actual call-up procedures that would be carried out in the event of war or other national emergency. The Reservists, backed by naval district headquarters personnel and complex electronic computers, were participating in an exercise that was part of a district-wide conference on mobilization. At the end of the two-week period, the paper Navy drifted into mothballs, and the Mobilization Team returned home.

At just about the same time, quite a different type of ACDUTRA was being performed at the U.S. Naval Training Device Center, Port Washington, N.Y. Here, RADM James D. Hardy, USNR, had reported in for two weeks of training. In the event of mobilization, RADM Hardy is scheduled to become the director of the Training Device Center.

Key technical and administrative personnel briefed the admiral on major training development projects and the supporting research program. During his two-week tour at the Center, RADM Hardy presented an illustrated lecture, "Acceleration Problems in Astronaut Training," in which he described many of the space research studies conducted on the human centrifuge.

Fifty-six men from varied walks of life left their homes not long ago to report on board the heavy attack carrier, USS *Independence* (CVA 62). They were the officers and men of a Naval Reserve training unit, Surface Battalion 4-6, Harrisburg, Pa.

These 11 officers and 45 enlisted Reservists were taking part in still another type of ACDUTRA. Usually, the men of this unit are assigned in groups of two and three to various Naval Reserve ships for their ACDUTRA. This year, however, they were given permission to train together on board a carrier if they could get enough volunteers. William F. Hornung, IC2, USNR, expressed his conviction that training on board the carrier gives a better insight into the billets the Reservists might fill. "On the carrier there is more modern equipment than on smaller ships. We have equipment at the training center which gives us the basic fundamentals for our job. And on board a carrier, such as *Independence*, we can really put these fundamentals to use in expanding our knowledge of up-to-date Navy equipment."

There's a pretty good chance that your ship or station has had a hand in training Reservists such as those just mentioned.

What's this ACDUTRA all about? Reservists who are affiliated with drilling units train regularly—some of them drill one night a week, others drill one weekend a month. Once a year many of them have the opportunity to put to practical use the training they received during the year. This is ACDUTRA.

All officers and enlisted men attached to—or associated in a pay status with—units of the Selected Reserve are required to take part in ACDUTRA. Other Reservists on inactive duty may perform ACDUTRA within the numerical, rank and pay grade structure limitations which are established each year by the Chief of Naval Personnel. First consideration is given to Reservists holding mobilization assignments and to junior officers with a mobilization potential for Fleet augmentation assignments.

Not all ACDUTRA is performed by old-timers. Each year thousands of recruits complete their ACDUTRA at the recruit training commands. NTC Great Lakes, Ill., for example, trains about 15,000 Reservist recruits every year. The biggest surge of recruits comes during June and July. Easter ranks next in popularity. Other Reserve recruits—many of them high school or college students—make use of Thanksgiving and Christmas holidays to take part in ACDUTRA.

The recruit trainees get a taste of Navy life as they study seamanship, damage control, fire fighting, and so on. They fire small arms, and compete in athletics and drills. Before they leave the training center, they

ON THE JOB—Airmen D. L. Barron (left) and J. R. Steinfelt of Naval Air Reserve Squadron VS-876 get ready to start engines of S2F *Tracker*.

SAILOR'

undergo various tests to determine their training progress. Many of these Reservists will sew on another stripe.

Members of Selected Reserve Crews—on board the ships ordered to join the Fleet last fall and soon to be released to inactive duty—undergo their ACDUTRA as a unit. In addition to drilling one weekend a month on board their ship, they cruise for two weeks each year. On alternate years, these cruises are taken under the guidance of the Fleet Training Group, operating out of Guantanamo Bay or San Diego, and the ships compete for Battle "E's" while undergoing this phase of their training. This period under the FLETRAGRU is similar to the Naval Reserve Operations Readiness Cruise which is, in effect, a modified refresher training period. This practical, seagoing training paid off in spades when the ships—and their Reserve Crews—received their ACDU orders almost 10 months ago.

Here is a quick rundown of some other types of ACDUTRA which

SALTY TOUCH—Reservists on ACDUTRA train on board CVA 62. *Below:* Reserve copter crew fly ASW mission.

THE TEST—Reserve Crew of *USS Miller* was ready to go when called. *Rt:* Weekend Warrior returns home.

should give you a pretty good idea how varied Reserve training can be.

Air Intelligence specialists from many parts of the country took part in an "Escape and Evasion Survival Seminar" on the west coast. The first week of their training was devoted to indoctrination in survival techniques. The second week, the Reservists put into practice what they had learned; they conducted a practical field exercise in a remote mountain area, living on survival rations or off the land while being hunted by Army and Marine Corps troops acting as enemy forces.

Reservists of Ship Activation, Maintenance and Repair Division 12-3, Stockton, Calif., spent their ACDUTRA reactivating the large tug, LT-2077. The tug was scheduled for use by NOTS Pasadena Annex, in operations near San Clemente Island, Calif.

A whirlybird squadron from NAS Dallas, Tex., got lots of practice in rescue operations while on ACDUTRA. The Reservists helped some 500 pilots and crewmen fulfill a requirement that they be rescued from the drink by helicopter.

Many communities may not know much about Reservists working in such fields as harbor defense or petroleum, but have first-hand knowledge of the Seabees' "Can Do" activities. For years, Reserve Construction Battalions have been helping build or refurbish Scout facilities, picnic areas and the like, while getting checked out in practical factors. Sometimes this combination of on-the-job training and good will is carried out during weekend drills; on other occasions, an ACDUTRA period may be devoted to heaving around on a large-scale community project.

The Seabees have now launched a four-year program designed to enhance their mobilization potential. Battalions from neighboring districts join forces in this new readiness program. The cycle of training goes something like this: The first year, the Seabee Reservists undergo organizational training at one of the CB centers. The second year they concentrate on military training at Marine Corps bases. The third year they undergo operational training at the centers, and the fourth year they have practical factor checkouts, also at the CB centers.

Each year, this Bureau issues a catalog of ACDUTRA periods available to Reservists. Under such headings as Advanced Base or Amphibious or Public Relations or BuWeps, you'll find just about all the courses you can think of—and many you've never run across before.

No matter what the field of specialization, or—for that matter— generalization, Reservists are getting the word. And, as the recent partial mobilization proved, when the "call" comes, the Reservists are ready.

RESERVE STRENGTH—CBs keep sharp with many projects. *Rt:* Reserve training unit gets the word at sea.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

Destroyer Command Designator

Sir: In connection with the designation "qualified to command a destroyer" —what are the criteria for such qualifications? Must one have actually commanded a destroyer before he is considered to be qualified for command, or may one be considered qualified if he has served as executive officer of a destroyer and his fitness report indicates that he is considered qualified for command?

On the same subject, is there an age limit beyond which a commander may not be assigned to command a DD? If so, what is the basis for such limitation?—T.B., CDR, USN.

- *BuPers Inst. 1210.9 of May 1959 introduced the "04" designator as a formal qualification for command of destroyers, and stipulated the means by which each of several different officer categories might qualify for consideration. These categories were determined by the status and degree of an officer's association with destroyers.*

In its original form the instruction included a provision for consideration of an officer who had previously been reported as qualified in a fitness report or a ship's monthly roster of officers. However, Change One to the instruction canceled this clause, and it was not included when the instruction was incorporated into the "BuPers Manual."

Art. C-7316 of the "BuPers Manual" dictates current prerequisites for qualification for command of destroyers, and establishes the means by which they may be accomplished.

This article differentiates between three general groupings of officers — those who have had command of a destroyer type, those who are currently in command of destroyer types, and those who aspire to command destroyers.

Officers in the first category may request that the Chief of Naval Personnel review their records to determine their eligibility for the 04 designator.

Officers currently in command will be considered upon recommendation of their unit commanders.

Officers in the third category must qualify under COMDESLANT/COMCRUDESPAC *Joint Inst. 1210.1A of June 1961, which requires practical examination in shiphandling and seamanship, a written exam on theoretical knowledge and a professional paper on some appropriate subject. This instruction also specifies certain eligibility requirements which must be met before an officer may be recommended by his commanding officer for the 04 designator. In every case, requests are reviewed by the Chief of Naval Personnel, and final action is based on qualifications, recommendations and the performance record of the individual concerned.*

It might be well at this point to give some explanation as to the meaning of the 04 designator. For those officers who have had command, and those who are in command, of destroyer types, it is a mark of exemplary service in command of such types. In the case of officers who have not as yet been ordered to command of a destroyer type, the designator signifies demonstration and attainment of at least the minimum practical and academic standards required of a destroyer CO.

A pool of officers holding the 04 designator is a most logical source of future COs — indeed, it is expected that future selection of destroyer type COs will be restricted more and more to those officers holding the designator. However, every officer ordered to command must be cleared by a standing command board in BuPers, and the actual assignment is a product of competitive screening and selection. Possession of the 04 designator does not exempt an officer from this process, nor does it, in itself, constitute assurance of orders to command a destroyer. At the present time it is possible that an officer well qualified by record, but lacking formal qualification, would be ordered to command of a destroyer.

In regard to the second part of your question, it can be generally stated that an officer who is much older than the average member of his promotional year group is at some disadvantage in competing for destroyer command billets. There is no maximum age cutoff as such, but age is a matter which is weighed along with other qualifying factors when he is before the command board. The reason for this should be obvious when you take into account the great physical strain which must be borne by a destroyer type CO under various operating conditions.—Ed.

Reapplying for LDO

Sir: Will my request for advancement to Limited Duty Officer be considered in subsequent years without further application to BuPers, or must I resubmit my application each year I desire to be considered? —J.H.M., PRCM, USN.

- *Your application for the Limited Duty Officer (Temporary) Program is valid for consideration by only one selection board. You must submit a new application each year you want to be considered.*—Ed.

Buzzed by 1.7 Per Cent

Sir: We accept the challenge issued by the Naval Air Facility, Monterey, Calif., which appeared in the December 1961 All Hands letters section. Monterey claimed its reenlistment rate during a 10-month period was probably higher than any station with an average on-board count of 500 enlisted men.

During a similar period at NAAS Fallon, Nevada (September 1961 through May 1962), we shipped over 46 out of 54 men who were eligible for reenlistment in the Regular Navy. Our reenlistment percentage: 85.2; Monterey's: 83.5.

For the information of readers who have not heard of NAAS (Naval Air Auxiliary Station) Fallon, it is located 70 miles east of Reno on U. S. Highway 50. The environment here is semi-desert. Some of the world's finest hunting, fishing, and camping sites are not far away.

We provide services to Fleet and Reserve Navy and Marine air squadrons which come here to sharpen up their bombing and gunnery tactics. Fallon has the Navy's longest runway—14,000 feet.

At present our on-board count is 585 enlisted men and 32 officers.—Max A. Piper, CAPT, USN.

- *Some quick figuring shows Fallon ahead by 1.7 per cent. Congratulations. Both commands, however, rate a pat on the fuselage.*—Ed.

Last BB to Be

Sir: A shipmate and I disagree on which battleship was the last to be decommissioned. I say USS *Wisconsin* (BB 64) was the last one. My friend insists it was *Iowa* (BB 61). All I need to prove I'm right is some verification by All Hands.—W.B.L., DCCS, USN.

- *You're right—but only by 12 days. Wisconsin was decommissioned on 8 Mar 1958. Iowa went out on 24 Feb 1958.*—Ed.

TWO BOW OUT—V. I. Hardwick, MMC (left), and B. J. McCarter, DKC, join Fleet Reserve in ceremony on board *USS Prairie* (AD 15).

Kitty Hawk or Forrestal Class?

SIR: In the January 1962 ALL HANDS you intimate that USS *Constellation* (CVA 64) is a *Forrestal* class carrier. Actually she is a *Kitty Hawk* class ship, so named after her sister ship, USS *Kitty Hawk* (CVA 63).

Kitty Hawk, at 1058 feet, is ten and one-half feet longer than *Constellation*. The extra space is an extension to accommodate the latest jet engine test equipment. She is also 268 and one-half feet wide, vice 252, owing to an addition to the angle deck.

Aircraft which have operated aboard *Kitty Hawk* include the fast, high-flying F4H *Phantom* fighter-interceptor and the A3J *Vigilante*.

Constellation is due to join *Kitty Hawk* in San Diego this summer after sailing around Cape Horn, the same route taken by *Kitty Hawk* last fall.

Perhaps ALL HANDS could tell its readers if the Navy is currently building any more *Kitty Hawk* class carriers, and if so, where and when they will join the Fleet.—J.R.M., LTJG, USN.

• *There seems to be a slight difference of opinion here. We checked with the Bureau of Ships and they tell us that* Kitty Hawk *was built under somewhat different specifications from* Forrestal, *and is carried as a* Kitty Hawk *class carrier in the "Naval Vessel Register." Thus, those that follow, such as* Constellation *and* America *(CVA 66) (due to be launched at Newport News, Va., in August 1963), are also* Kitty Hawk *class carriers. However,* Kitty Hawk *is only a few feet longer than* Forrestal *and is the same width, hence all of these ships are generally known as* Forrestal *class carriers.*

The only "super" carrier not considered in the Forrestal *class by BuShips is* USS Enterprise *(CVAN 65). She is truly in a class by herself.*—ED.

Emergency Stop

SIR: We interrupted a hot argument to write this letter. The subject of the debate is the distance required to stop the forward progress of a *Midway*-class aircraft carrier from flank speed forward. Emergency stop is the condition in question.

Can you resolve the problem?—G.W.C., GMC, USN.

• *We'll try. Unfortunately, our Editor-in-Charge-of-Stopping-Aircraft-Carriers couldn't persuade any carrier captain to let him make an emergency stop with his ship.*

In lieu of learning by doing, we turned to BuShips where we found there are so many factors involved in stopping an aircraft carrier that a definite, once-and-for-all answer is out of the question. However, we did glean these tidbits.

During official trials, the distance required to stop USS Franklin D. Roosevelt *(CVA 42) from full power ahead was 1360 yards.*

At the time of the trials, the ship was light (56,360 tons) and the exercise was conducted under trial conditions.

In other words, the maneuver was anticipated by the throttlemen.

No post-conversion trial data of this nature was available. However, BuShips estimated that, under normal conditions, the distance would probably be in the vicinity of 2100 yards.—ED.

Longest Continuous Deployment

SIR: I would like to nominate USS *Mockingbird* (MSCO 27) (former AMS 27 and *YMS 419*) as a contender in the continuous deployment sweepstakes. I don't know exactly when she left the United States during World War II, but the *Navy and Marine Corps Awards Manual* (NavPers 15790) shows that, as USS *YMS 419*, she participated in minesweeping operations in the Bungo Suido (Honshu) area as early as 27 Oct 1945 and was awarded the Navy Occupation and China Service medals for service commencing on 13 Oct 1945.

Since it takes about 30 days for a ship of her class to cross the Pacific, her deployment obviously started before October 1945. She stayed continuously in commission in WESTPAC and was homeported in Yokosuka, Japan, until the outbreak of the fighting in Korea.

She served in the Korean campaign and was awarded the Presidential Unit Citation and earned all 10 of the Korean engagement stars that have been authorized. She continued in WESTPAC after Korea and served until 1955 or '56, at which time I believe she was decommissioned and transferred to the Japanese Maritime Self Defense Force.

I believe her total continuous deployment overseas was about 10 years, and as one of her former skippers, I would be interested to know the exact length of this deployment. It appears that, to the Mine Force motto, "Where the Fleet goes we've been," must be added, "and stayed longer."—LCDR R. L. RODIER, USN.

• Mockingbird's *continuous deployment time is rather impressive, but it wasn't quite so long as you thought.*

We don't have the entire story but, so far as we can tell, she left San Pedro, Calif., on 27 Aug 1945 for the Far East. She returned to the United States in April 1946 for overhaul and, to the best of our knowledge, didn't go back to Japan until about January 1948. She then remained overseas until she was transferred to the Korean navy on 6 Jan 1956. The last we heard she was still serving in the Korean navy as Ko-Chang *(MSC 521).*

During her career in the U.S. Navy, she was USS *YMS 419,* Mockingbird *(AMS 27) and* Mockingbird *(MSCO 27). She earned the following awards: Presidential Unit Citation; American Theater Medal; Asiatic-Pacific Campaign Medal (one star); World War II Victory Medal; China and Navy Occupation Service Medals; Korean Service Medal (10 stars); United Nations Medal; and Korean Presidential Unit Citation.*

Mockingbird *was commissioned on 18 Nov 1944. Her first minesweeping assignment was in the waters around Bungo Suido, Honshu, from 27 through 30 Oct 1945.*

Her continuous deployment, accord-

ing to available records, was eight years—January 1948 to 6 Jan 1956. USS *Augusta (CL 31), to which we often refer in such claims, was deployed in the Asiatic area for seven years—1933 to 1940. Some ships in the "Old Navy" beat your eight-year mark by many years.* USS *Scorpion, for example, was deployed overseas from 22 Oct 1908 to 11 Jul 1927—almost 19 years.*—ED.

World War I Gyro School

SIR: I was rereading the article entitled "Gyro Compass" (November 1961 "What's in a Name"). It provided the stimulus I needed to make the trek from the house to the garage where I dumped out the contents of an old sea bag and came up with a photo of the Sperry Gyro class of 1918, for Navy trainees.

More than 40 years is a long time to try to remember anything. However, with the help of the photograph, I could recall quite a bit.

Getting back to your article, I found no discrepancies except, as I recall, in 1911 there were two gyro compasses installed on our ships at sea for experimental purposes. One was on the armored cruiser *Maryland* and one on *Delaware* (BB 28).

The maintenance men on both ships were rated Elec. 2nd class (g). In *Maryland*, there was a chap named Weiler. A guy named Tom Morgan was in *Delaware*.

Both men stood watch, cussed and slept alongside the contraption during tests and both men later went to their reward—provided in this case by Elmer Sperry.

Both were offered and accepted employment with the Sperry organization at the expiration of their enlistments.

Morgan, in true Horatio Alger manner, progressed through the Sperry organization until he reached its presidency and ultimately became Chairman of the Board.

Mr. Weiler, after several years with Sperry, returned to his first love, the Navy, in a civil service capacity. He later was in charge of the gyro laboratory at the Bremerton Navy Yard.

Before World War I, when ships equipped with a gyro compass were in the yard for regular overhaul, it was Navy policy, in cooperation with the Sperry Company, to send its gyro electricians to the Sperry Building in Brooklyn for additional instruction in theory and operation.

Numerically, these classes were small but, with the advent of World War I, conditions changed.

Navy asked Sperry to build a compass which would be light enough to use in destroyers.

Sperry complied and the number of students in the gyro class mushroomed sufficiently to give it the status of a school.

Our student body consisted of officers assigned to new destroyers, enlisted men "drafted" from the Fleet and reenlistees.

LONG AGO—Members of Gyro Compass Class of 1918 pose for photo. Graduates of the six-week course were assigned to new destroyers.

Our curriculum, under a civilian instructor, consisted of general theory, occupation and maintenance.

For our maintenance course, we had only one old compass to work on which, incidentally, was not the type we were studying.

It was pulled apart so often the threads were worn off its special bolts and parts. At times, we even had parts left over, but it served the purpose.

School hours were from 0900 to 1130 and from 1300 to 1630. Our instructor tried patiently, but unsuccessfully, to imbue us with the solid facts on the theory of the instrument but he was over our heads.

He also made a weak pass at giving us home work. That was a laugh. Where would we do it? In Times Square or St. Nick's Ballroom?

At 1630, the class would scatter from Brooklyn to the Bronx; each to his own entertainment.

The course of instruction lasted six uninterrupted weeks. It was like riding around on a loop bus; someone was getting on or getting off continuously.

When the course ended, the graduates were transferred to 1000-ton destroyers as they were launched. There we tested the capabilities of the compact model gyro compasses. Sometimes, under severe conditions, there was considerable doubt as to which would win—the elements or the gyro compass.

Like most things that we see in retrospect, they were good days. Even viewing it objectively, I doubt that there was ever another Navy school to compare with the Sperry Gyro School of 1917-18.—R. R. Myers, EMC (Ret).

• *Thanks, Ray, for another story from your nearly bottomless sea bag.*—ED.

LCTs in World War II

SIR: I read with interest the information you published in your February issue about USS *Breese* (DM 18). The part about the invasion of the Russell Islands, where she escorted LCTs, interested me most.

Unless I've missed an article somewhere during the intervening years, this is about the first mention anyone has made of LCTs in that area.

I served in LCT Flotilla Five in the Solomons and aboard *LCTs 60* and *62* until long after Bougainville was secured. I would be interested in a history of LCTs in these Pacific operations and I believe quite a few of my old shipmates would be, too.

We charged frantically around (flank speed was about six knots) in all directions, carried anything anywhere, and in all modesty, we did a good job.—J.R.M., SMC, USN.

• *No one will argue that last point with you. LCTs did a magnificent job in the Solomons with their "milk runs" for resupply and troop reinforcement during the struggles for Guadalcanal, Bougainville and other islands in the southwest Pacific area.*

Unfortunately, the Ships' History Division of the Office of the Chief of Naval Operations has not yet prepared a narrative history of LCT Flotillas five and six or LCT 60 *and 62.*

Histories of all the ships in the Navy are being written by this division for the series "Dictionary of American Naval Fighting Ships." Volume I has already been published and Volume II should be out this year. The histories of unnamed ships will be prepared when those on the named ships are completed.

Perhaps this letter will stir up the memories of other readers who recall the exploits of the LCTs.—ED.

CARRY-ALL—Navy's *Crusader* is tested for capabilities to take on role of attack aircraft and pack variety of weapons shown here.

Gold Crewmen Claim Record

SIR: A letter to the editor in the May ALL HANDS commended the high reenlistment rate achieved by VS-35. It was indeed a fine showing—but I feel that the Gold Crew of USS *Robert E. Lee* (SSBN 601) has chalked up a reenlistment record which will be even harder to top.

In the 20 months since commissioning, 95.6 per cent of our career men (22 of 23) have shipped over, and 71.4 per cent of our first termers (10 out of 14) have followed suit, for an over-all reenlistment average of 86.5 per cent.

These figures do not take into account the dozens of extensions or agreements to extend which have been executed. The Gold Crew averages about 125 men.

Can anyone top these figures with the same number of people involved?—M. S. BLAIR, CDR, USN.

• *We don't know if you've achieved a record for your class or not, but we will say that we have not yet heard of any better. In any case, Commander, you have obviously got a record to shoot for. Our congratulations.*—ED.

Add-a-Stripe Day

SIR: USS *Sierra* has celebrated an add-a-stripe day. The ship set a new promotion record aboard when 144 men (15 per cent of the crew) were advanced in rate. The former high was 125 men advanced at one time.

The ship added six new chiefs, 10 new PO1s, 49 new PO2s and 79 new PO3s. All these men were officially advanced by the ship's commanding officer, Captain George R. Reinhart, USN, during a special advancement ceremony. *Sierra* is currently undergoing a $2 million FRAM overhaul period at the Naval Shipyard, Portsmouth, Va.—Crew of USS *Sierra* (AD 18).

• *This is an impressive number of men to be advanced aboard one ship on one day. It speaks well of the men advanced, certainly, but it also indicates that there has been some good leadership exhibited along the line.*—ED.

Aviation Administration Man?

SIR: Some scuttlebutt concerning a special rating for aviation personnel who perform clerical duties has been circulating through our squadron for several months. We've yet to hear anything official. If such a rating is being planned, I, for one, would be interested in knowing its name, the date it will become effective, and the present ratings which would be eligible to change over.—M.E.W., AMS3, USN.

• *Speculation about a special rating for aviation clerical workers may be the result of the General Aviation Technical Training Conference which was held at Memphis, Tenn., last April. It was proposed at the conference that a rating named Aviation Administration Man be incorporated into the enlisted structure.*

As of this writing the Aviation Administration Man rating is no more than a recommendation; the proposal has yet to be considered by the Permanent Board for Review of the Enlisted Rating Structure. Since it's still just an idea, no action has been taken on such technicalities as eligibility requirements.—ED.

Who's in Command?

SIR: I am searching for information that will clarify a situation which took place recently, at the Naval Air Station, Point Mugu, Calif. I have discussed this problem with several senior officers in the local area and I still do not have an acceptable answer.

One of the departments of this naval air station has some 15 small craft assigned, most of which are former Air Force aircraft rescue boats (AVRs) and ex-PT boats. They furnish logistic support for the offshore islands and serve as range clearance boats for the Pacific Missile Range. A first class petty officer is normally in charge. On occasion, however, a commissioned officer is embarked for unusual assignments.

Recently, one of these AVRs participated in a celebration at Santa Barbara, Calif. The Commanding Officer, Naval Air Station, Point Mugu, and two other Navy captains were embarked in the boat during part of the festivities which required the boat to get under way. The two captains, one a line officer eligible for command at sea and the other a CEC officer, were guests of the commanding officer.

When the guest line captain boarded the AVR, he queried the commanding officer of the naval air station as to his date of rank. It turned out that the guest line captain was two years senior to the CO of the naval air station. Subsequently, the guest line captain remarked, "I guess I am in charge of the boat."

Article 1331, *U.S. Navy Regulations* says: "When embarked in a boat, the senior line officer, including commissioned warrant and warrant officers, eligible for command at sea, has authority over all persons embarked therein, and is responsible, under all circumstances, for the safety and management of the boat." Applying this article, it would seem that the line captain should have been in charge of the boat.

Article 0701 of *U.S. Navy Regulations*, however, says: "The responsibility of the commanding officer for his command is absolute, except when, and to the extent, relieved therefrom by competent authority, or as provided otherwise in these regulations. The authority of the commanding officer is commensurate with his responsibility, subject to the limitations prescribed by law and these regulations. . . ."

My question, simply stated, is: "Who should have been in charge of the AVR?"

This is what I think: An AVR is not a boat, in the sense that an AVR is not taken aboard a ship. It is a craft that operates independently and is self-sustaining. If this be the case, Article 1331, *U.S. Navy Regulations*, does not apply to the situation in question. Article 0701, *U.S. Navy Regulations*, says, in part, that the responsibility of the commanding officer for his command is absolute and, also, that a commanding officer's authority is commensurate with his responsibility. I would say, with the above mentioned criteria as my guidelines, that the commanding officer of the naval air station should have been in charge of the AVR.

It is not infrequent that a commanding officer of a ship makes the accommodation ladder of another ship and the two commanding officers go ashore together. In this case, it is very possible that the commanding officer furnishing the gig could be junior to his guest. Article 1331 very definitely applies in this case, since there is no question about a gig being a boat. In this situation, would the junior commanding officer, in compliance with Article 1331, relinquish command of his own gig to the senior commanding officer?—LT J.P.C., USNR.

• *No he would not. The gig is his own boat, part of his command—and the second commanding officer, even though senior, is a guest or passenger.*

The authority of the commanding officer is absolute over his entire command, and in either case (the AVR or the gig) the boat is part of a command. The officer detailed to command has precedence and authority over all passengers embarked, whatever their rank, and passengers are subject to his authority.

The question here is not one of date of rank, but rather, who is commanding officer and who is the passenger. By Articles 0769, 1305, 1321 and 1329 of "Navy Regulations," the commanding officer, embarked in a boat of his own command, has the same authority over passengers and crew he has on board his own ship or station.

In the incident on board the AVR, the guest captain, when he ascertained that the commanding officer of the air station was embarked in his own boat, should have realized he could not take charge of the boat, as he had no authority to relieve a commanding officer of his responsibilities.

The following regulations are pertinent:

Article 0701.1—*"The responsibility of the commanding officer for his command is absolute. . . . Delegation of authority shall in no way relieve the commanding officer of his continued responsibility for his entire command."*

Article 0757.1—*"Boats shall be regarded, in all matters concerning the rights, privileges and comity of nations, as part of the ship or aircraft to which they belong."*

Article 0769—*". . . all passengers in a ship or aircraft of the naval service are subject to the authority of the commanding officer. . . ."*

Article 1305—*"An officer . . . detailed to command . . . has precedence over all officers or other persons attached to the command, whatever their rank. . . ."*

SHIP SAVER — USS *Grasp* (ARS 24), a salvage ship in Service Force Pacific, departs Pearl Harbor to conduct another operation.

Article 1329—*"The commanding officer of a ship or aircraft . . . with a flag officer embarked . . . shall be subject to the orders of such flag officer; other officers embarked as passengers, senior to the commanding officer, shall have no authority over him."*

Article 1331—*"When embarked in a boat the senior line officer . . . eligible for command at sea has authority over all persons embarked therein, and is responsible under all circumstances for the safety and management of the boat." (This article apparently covers a situation when the commanding officer is not on board.)*

As you can see, much has been written about the authority of the commanding officer.—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS *Santa Fe* (CL 60)—The 16th annual reunion will be held in Philadelphia, Pa., during October. For additional information, write to Frederick C. Jaissle, 18 Cedar St., Hudson, Mass.

• *Sixth Seabees*—A reunion will be held at the Bismarck Hotel, Chicago, Ill., 11-13 October. For details, write to Roy Anderson, 1 Chestnut St., Clarendon Hills, Ill.

• *Great White Fleet*—The annual reunion for all men who made the world cruise in 1907-09 will be held in the U. S. Grant Hotel, San Diego, Calif., on 14 December. For information, write to Harry S. Morris, TMC, USN (Ret), 5070 Marlborough Dr., San Diego 16, Calif.

• FAWTULANT (Detachment Alfa), Jacksonville, Fla.—All who served in this unit and who are interested in holding a reunion may write to Walter R. August, 704 West Beacon Rd., Lakeland, Fla.

One Word for Two

SIR: What is it, "personnel man" or "personnelman?" We have a running argument here in the office and no one wants to concede defeat.

I say it is "personnel man," as indicated in the PN training course, NavPers 10258C (Revised 3-61). Some of the others say it should be "personnelman," and use Change Seven to the *BuPers Manual*, Change 18 to the *Qualifications for Advancement in Rating* and the current change to the *Navy Enlisted Classification Manual* as their references.

If I'm wrong, when did this change take place? — N.P.M., PN1, USN.

• *You are wrong but you haven't been that way long. The publications to which your office-mates refer were only recently changed to the one-word usage.*

The "Manual of Qualifications for Advancement in Rating," NavPers 10068 (Revised), issued in September 1952, used two words. It wasn't until Change 18, dated September 1961, that it was changed to "personnelman."

The "Manual of Navy Enlisted Codes," NavPers 15105B, also used two words until September 1961. At that time, Change Six, which adopted "personnelman," was issued. The current change to the "BuPers Manual," Article C-2103(5), also uses "personnelman."

You pick as your refernce about the only book we know of that has not been changed to reflect the current usage, "personnelman." The current usage does make sense, since it now conforms to other ratings such as yeoman, opticalman, instrumentman and radioman.—ED.

Eligibility for STAR Program

SIR: I read in your magazine about the number of Navymen being advanced and reenlisted under the STAR program.

I am a fireman, I joined the Navy in August 1961, and I will graduate from Class "A" EM School in September. Am I eligible to advance to EM3 under the STAR program when I graduate? —J.C., FN, USN.

• *You will be eligible to advance under the STAR program, provided you reenlist for six years and graduate in the upper half of your class. Since you need one year of active naval service to be eligible for the STAR program, you must reenlist sometime this month. You shouldn't waste time, however. Work on the second half of your qualifications. Hit the books hard and make sure you will be in the upper half of your class. Don't try to ride the middle rail either. Be high in the upper half, just to make sure.*

The eligibility requirements are simple. Men going into STAR must have served at least one year on active naval service, but less than six, reenlist for either four or six years to provide a total of seven or more years' active naval service, and meet the test score requirement for entering Class "A" school. The applicant's CO can waive up to 10 points on combined test score requirements or up to five points on a single test score requirement. (Since you are already in school, it's obvious you qualify here.)

The requested school (for those not already in school) must be in the normal path of advancement, and the applicant must be recommended for career status by his commanding officer. Since you are an EM, you may be reenlisted and advanced by the local command without prior approval of the Chief of Naval Personnel, provided you meet all the requirements that are listed in BuPers Inst. 1133.13A. In addition to EMs, men in the following ratings may also be advanced under the STAR program without prior approval: AD, AE, AO, AQ, AT, BT, CT, ET, FT, GMT, GS, IC, MM, MR, PR, PT, RD, RM and SO. Men in other ratings are also eligible for the STAR program, but must have approval of the Chief of Naval Personnel before they can be reenlisted and advanced.

If the applicant waits until after he graduates from Class "A" school (as in your case), he may still reenlist and be advanced under the Star program—if he graduates in the upper half of his class. —ED.

DD is Fast Worker

SIR: Although USS *Barry* (DD 933) made a fine Christmas tree on the front cover of the December issue of ALL HANDS, we also want your readers to know that *Barry* is a fast-working Navy destroyer.

We proved this last March in a HUK operation in the Atlantic. At exactly 0727 on the morning of 20 March, *Barry* signaled USS *Lake Champlain* (CVS 39), "ready to come alongside." Our CO, Commander H. O. Webster, USN, cranked up flank speed and bored into the refueling slot. As the gap between the ships closed rather rapidly, Rear Admiral J. R. Reedy, USN, COMCARDIV 20, aboard *Lake Champlain*, hailed, "Captain, we have a hose. You don't have to pass the fuel across in buckets."

A combination of calm seas and skilled ship handling brought *Barry* to within 10 yards of the carrier and the first lines were almost handed across. As the fuel hoses snaked out across the gap, *Barry* "tigers" reached out and guided them into their trunks. At 0733, five minutes and 55 seconds after the approach began, both forward and after fueling stations reported that pumping had started.

A band appeared on a lower deck of the carrier, and to the music of "Anchors Aweigh," the carrier announced that *Barry* had set an all-time record for approaching and rigging to receive fuel alongside USS *Lake Champlain* (CVS 39).

Barry received the following message from RADM Reedy: "Congratulations on your fine performance fueling today. Your time of five minutes and 55 seconds from commencement of approach to receiving fuel is the fastest of 224 DDs alongside *Lake Champlain.*" — D. A. Frothingham, ENS, USNR.

• *This sounds like a combination of some mighty fancy ship handling and some pretty efficient hose handling. Nice going.*

Record rigging time seems to be almost a seasonal topic. We have been receiving many letters lately which have claimed records in this department. Yours is slightly different from most because the time includes the approach.

USS Truckee *(AO 147) tells us of another impressive rigging time when* USS Bigelow *(DD 942) rigged forward in 83 seconds and aft in 97 seconds while refueling from* Truckee. *This, we feel quite sure, does not include approach time.*

Refueling from tanker to destroyer may not be in the same league with carrier to destroyer, but the Bigelow *mark is fast.*

You may be interested in a rather extensive list of rigging times that has been compiled by Truckee. *It appears in the Letters to the Editor section of the May 1962* ALL HANDS. — ED.

. . . how to send ALL HANDS to the folks at home

Superintendent of Documents
Government Printing Office
Washington 25, D.C.

ENCLOSED find $2.50 for a subscription to ALL HANDS magazine, the Bureau of Naval Personnel Information Bulletin, to be mailed to the following address for one year

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BLINDFOLDED boxers highlight *Vulcan's* smoker. *Below:* R. P. Hatfield, HM2, acts as master of ceremonies.

Vulcan Has a Smoker

HARD WORK, imagination and large doses of advance planning by members of the ship's Enlisted Recreation Committee combined to make a recent smoker, staged aboard USS *Vulcan* (AR 5), at Norfolk, Va., an outstanding success.

As in all smokers, there was boxing and plenty of it – fast-paced, evenly matched bouts which brought roars of approval from *Vulcan's* crew. The evening's entertainment didn't begin and end with just boxing, however.

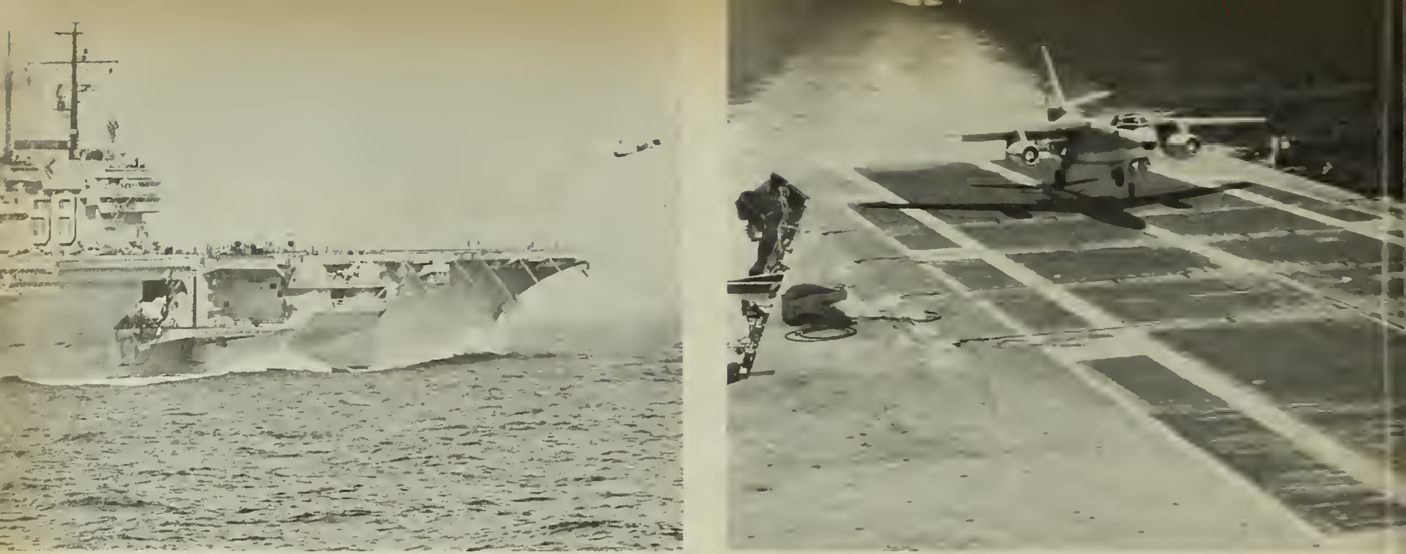
There were, for example, the antics of Hospital Corpsman Second Class R. P. Hatfield. The fast-talking *Vulcan* medic out-Grouchoed the inimitable Groucho while acting as master of ceremonies for the show.

There was blindfolded boxing which, as you can well imagine, bore little resemblance to the real article. And there were also several *Vulcaneers* in varied costume performing their version of the *Vulcan* twist – which resembled nothing seen before or since anywhere.

Topping it all off were several performances by the Rebelaires, a swinging quartet featuring electric guitars and a way-out singer. This group tore up hill-billy, rock-and-roll and honky-tonk fans alike.

The veteran Atlantic Fleet Service Force repair ship had just returned to her home port from a two-week trip to San Juan, Puerto Rico.

VULCAN'S Rebelaires go all-out with their rendition of 'Auctioneer.' *Rt:* An accordionist plays a solo.



UP AND DOWN—Jet is catapulted from *USS Forrestal* (CVA 59). *Rt.:* A3D returns to *USS Oriskany.*

Off Into the Wild Blue

YOU'VE SHOWERED AND SHAVED, had breakfast and checked your charts. The loudspeaker in the readyroom warns you to start for the flight deck.

You zip your G suit, pull on your Mae West, check your cigarette supply and gather up your hard hat, navigation bag and plotting board. As you go through the door, a box lunch is shoved under your arm.

As the escalator moves you toward the flight deck, a speaker squawks, "Hey, Mac, going on a picnic?" You'd think they'd get tired of the same corny gags.

When you step off on the flight deck, it's still an hour before dawn. Sometimes you yawn because, in midsummer, that's early. You climb into your bird.

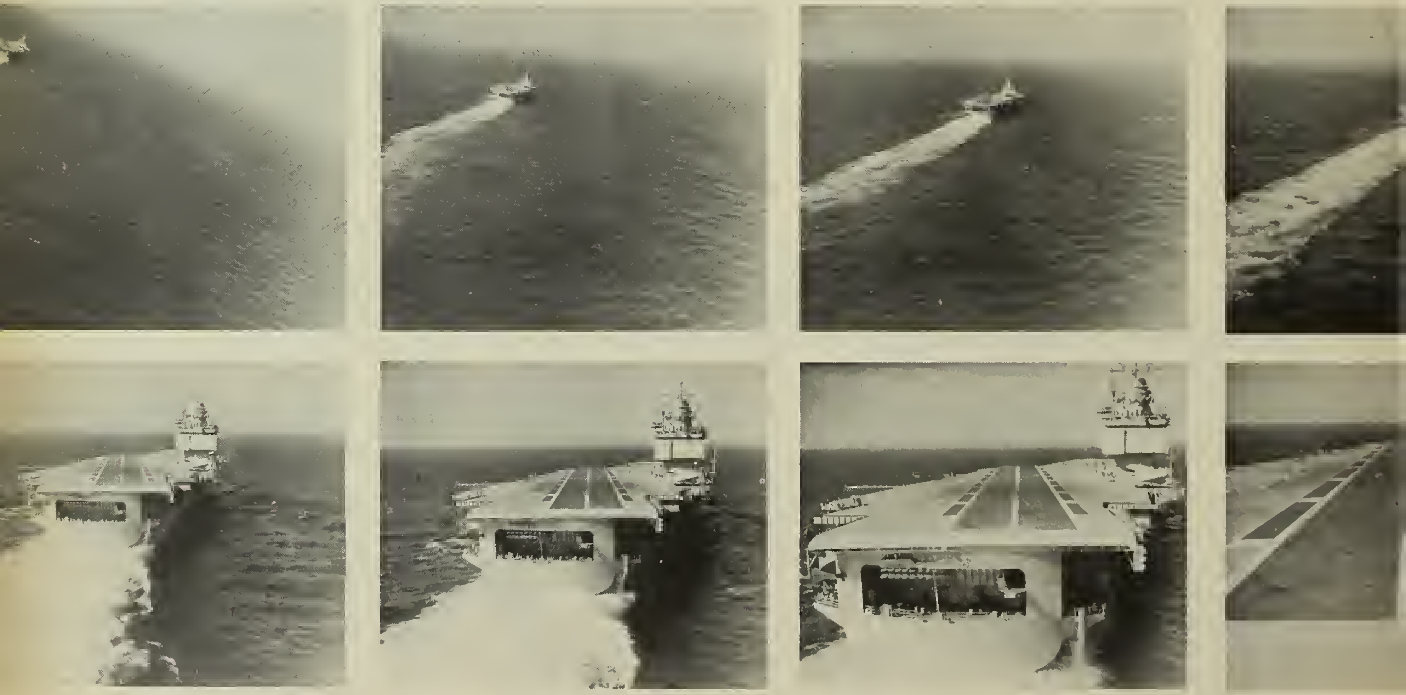
The engine is running. You check the preliminary items. Everything on the check list is OK and you are securely strapped in by the plane captain. The jury struts are removed and the folded wings flutter a little as the wind tests their strength.

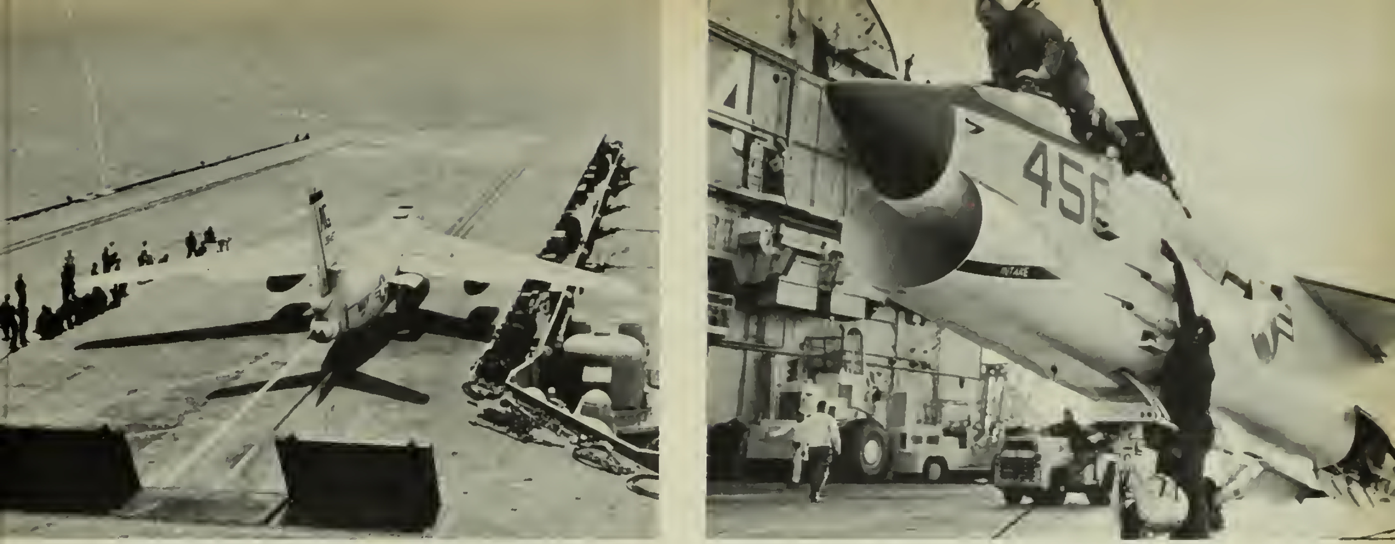
The tie-downs are removed and you push down with both feet to hold the brakes until the signal to taxi forward. Then you release the brakes, add power with the throttle and your plane moves forward.

When you're given the signal, you throw the lever and watch the wings of your bird unfold. You lock them and move the flap lever to the down position and go over the takeoff check list.

The wind has freshened since you came up on deck and you find you need more power to taxi up the center of the flight deck to the "Y" where the line splits in two —one to be launched from starboard, the other from port.

HEADED HOME—Unusual sequence of photos shows pilot's eye view of jet landing on *USS Enterprise* (CVAN 65).





UP START—A3D is launched from USS *Independence*. *Rt.:* Pilot mounts *Crusader* on USS *Oriskany*.

- - and Back Home Again

By now, the big carrier is heeling into the wind. This time you're waved to Leaping Lena, the port cat. You hold the right brake and pivot into line for the catapult.

Your position is good and the director waves you ahead. You move up slowly until your plane is jerked to a halt by the taut hold-back line.

The yellow shirt signals "off brakes." Your heels drop to the cockpit floor clear of the brake pedals. You move the stick back and forth in a last minute check of the controls and are gratified to see the ailerons and elevators obediently wag back.

Yellow shirt passes the lead to the catapult officer who gives the two-finger turnup signal. You push the throttle forward and clamp your hand around the throttle to prevent its slipping back during the launch.

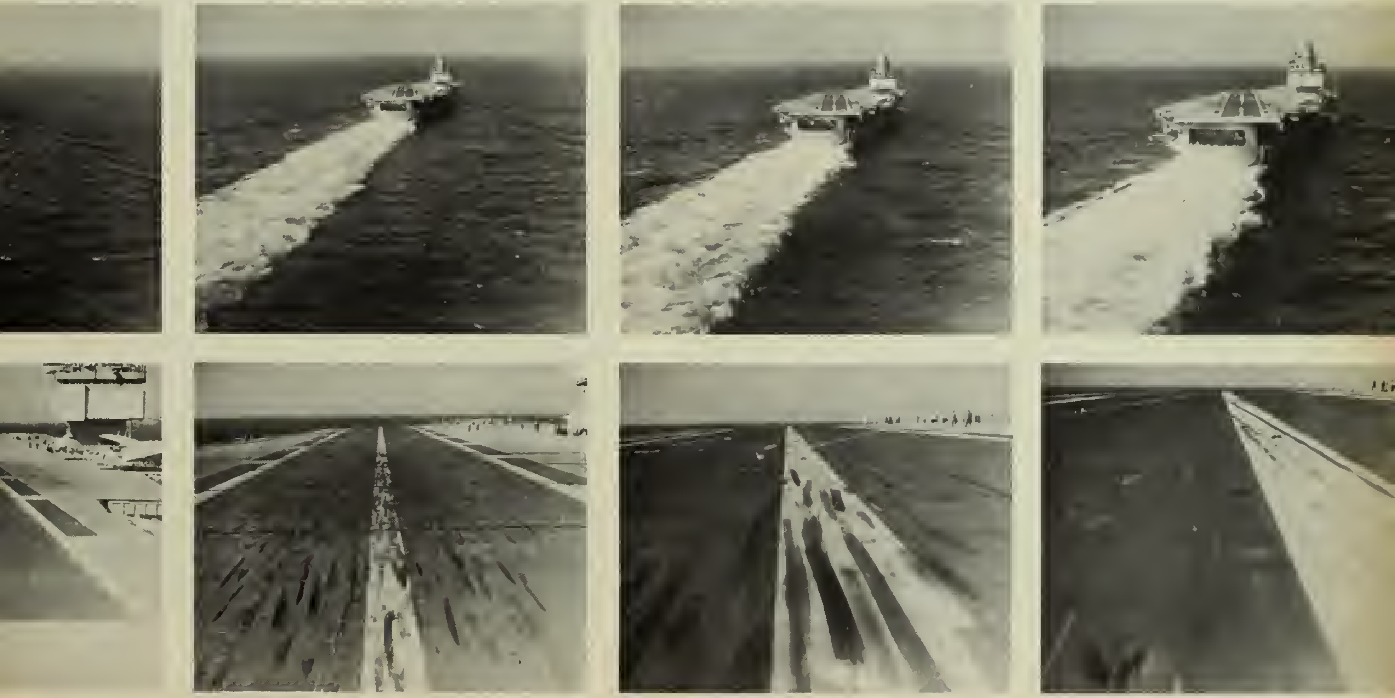
The engine winds up and stabilizes at full power. Its scream penetrates your crash helmet. You glance at the instrument board. Everything's OK. You're ready to go.

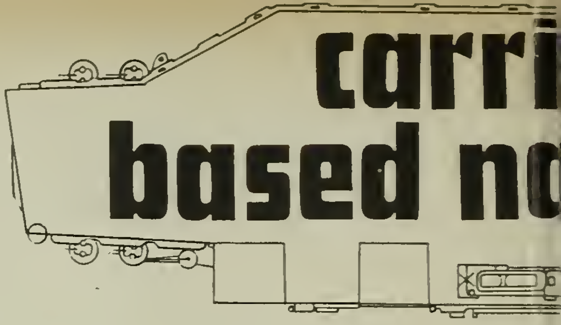
You salute the catapult officer—your signal that you're all set. Your right elbow rests in your lap. You keep it poised with stick neutral until after the acceleration period. The plane is trimmed for level flight at takeoff speed.

A few swift seconds after you salute, the cat officer drops to one knee and points his arm toward the bow of the ship. That's it—the fire signal. In a second or so, the power of the cat hits you. Your bird shudders and Gs force your head back hard against the pad as the jets roar in your ears.

Your breath is sucked out of you as the catwalks streak

HERE'S HOW it looks to fly in and land on the flight deck of the Navy's nuclear powered aircraft carrier.





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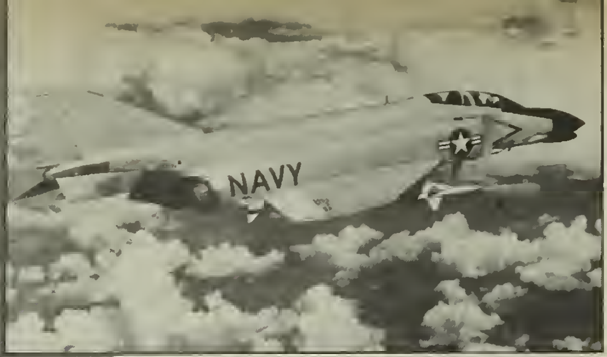
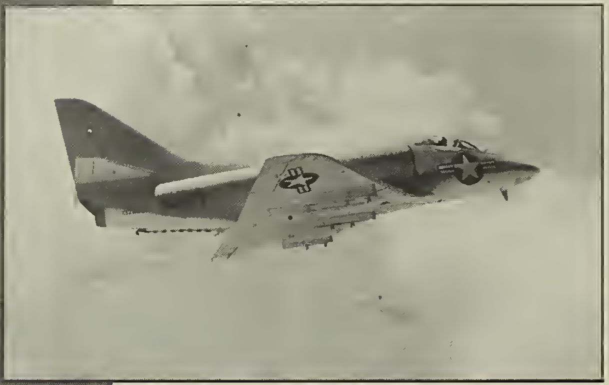
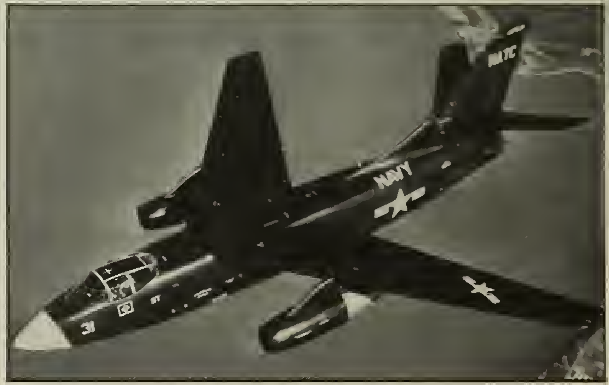
Note: For simplification, series numbers of most models have been omitted.



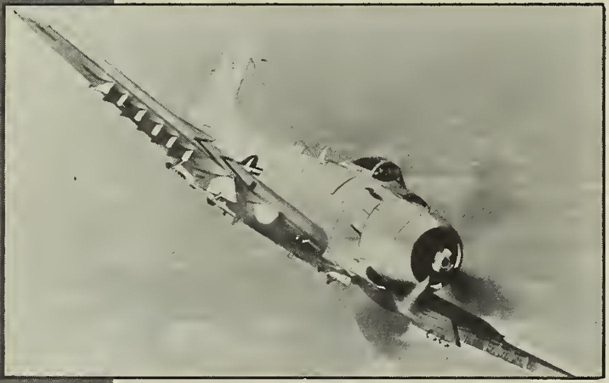
A2F INTRUDER
Low-level attack bomber



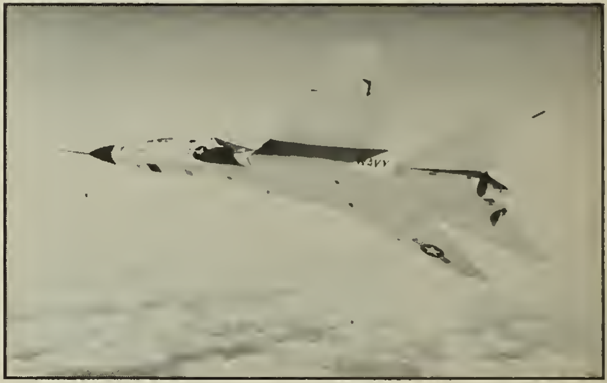
A4D SKYHAWK
Single-seated light attack bomber



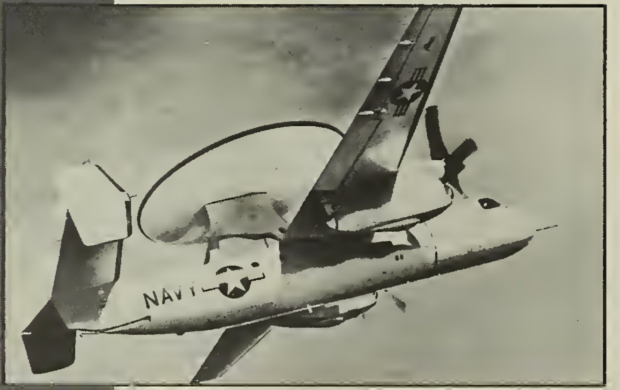
A3D SKYWARRIOR
Heavy attack bomber



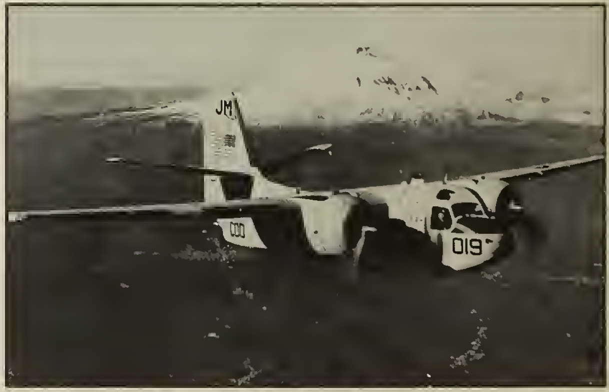
AD SKYRAIDER*
Prop-driven attack plane



A3J VIGILANTE
Two-seated all-weather attack bomber



W2F HAWKEYE
All-weather early warning aircraft



TF TRADER
Utility aircraft for supplies and personnel

Prepared by ALL HANDS Magazine

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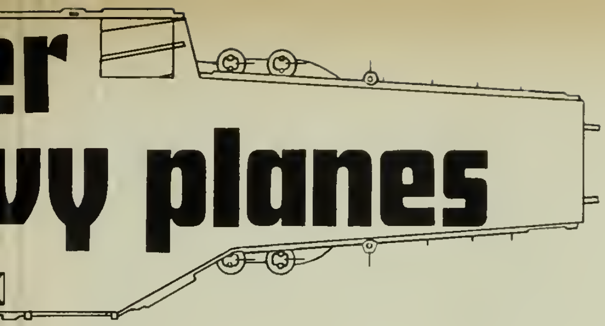
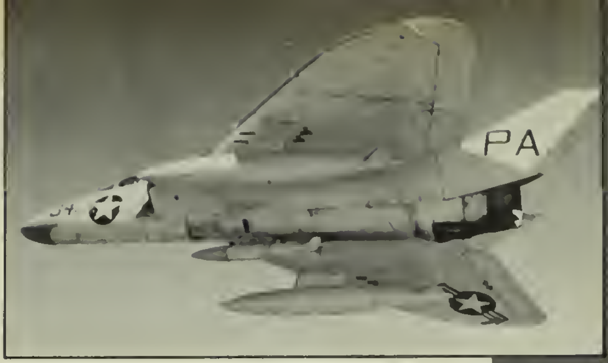
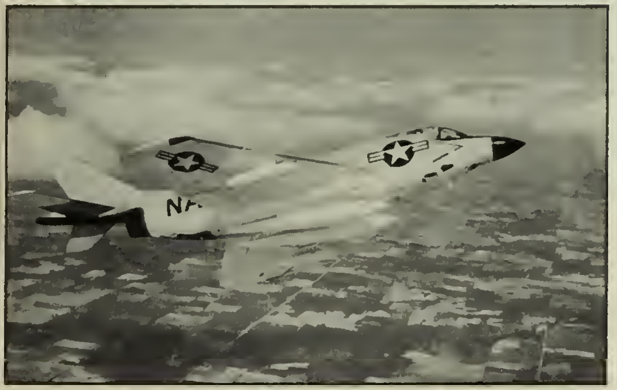
vy planes

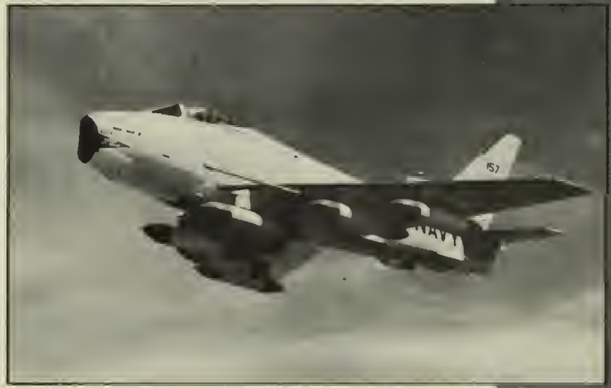




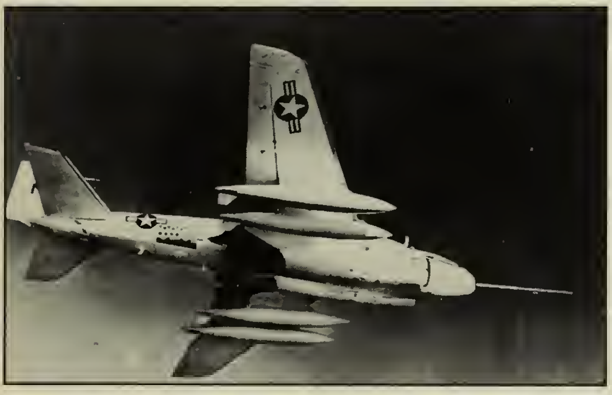
F4D SKYRAY*
Delta-winged interceptor



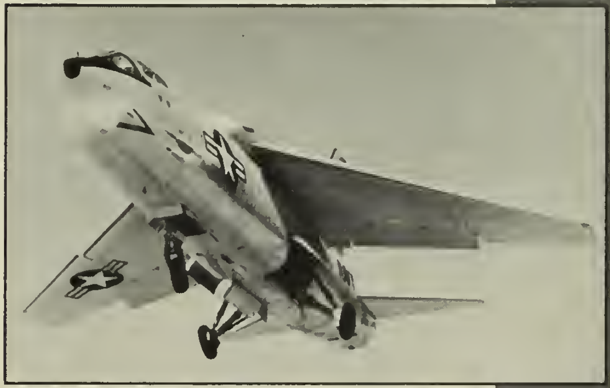
F3H-2N DEMON
Single-seated all-weather fighter



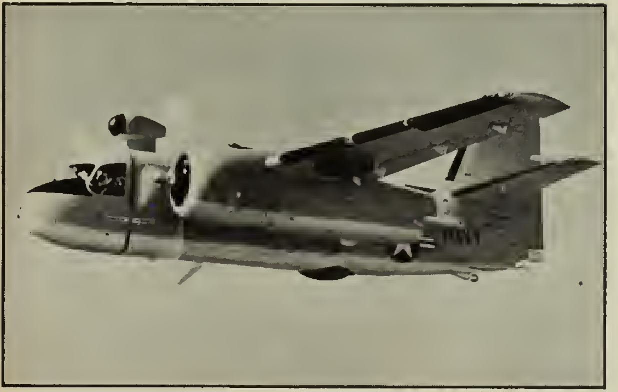
FJ-4 FURY*
Single-seated fighter-bomber



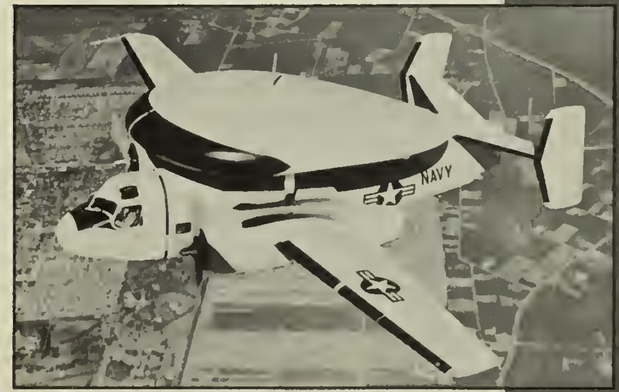
F4H PHANTOM
Two-seated interceptor and attack bomber



F8U CRUSADER
All-weather fighter



S2F TRACKER
Four-seated submarine search and attack plane



WF-2 TRACER
Early warning aircraft

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* Being phased out.

PILOTS OF VF-53 are briefed before flight. *Rt.*: Carriermen on board USS *Lake Champlain* (CVS 39) rig barrier.

by you. You reach with your left hand and flick the landing gear lever and watch the wheel position indicators point "up." You ease the control stick and bank away from the carrier which drops behind you in the turbulent jet wash.

YOU'RE AIRBORNE. When you look down and off in the distance, you see the Atlas Mountains and the Pillars of Hercules. "Now who's holding up the sky?," you think.

The target is simulated—an abandoned airstrip near the Med. You put in a good day in the air and head back to the nest. Like a businessman taking the 5:05 back to the suburbs. No, not quite like that.

Finally, the welcome outline of the carrier comes into sight. *Tacan* guides you and you begin to climb. You're tired and feel cramped. You have to force yourself to concentrate. One mistake could be your last. You take a drag or two of pure oxygen to sharpen your senses.

The flight breaks up about 28 miles astern. Altitude is 20,000 feet.

THE PLANES APPROACH the carrier at one minute intervals descending to the 500-foot approach altitude.

About five miles from the ship, you lower your landing gear, flaps and tail hook. At three miles, you see the runway lights on the flight deck.

You follow the beam in and watch for the meatball. When it comes into sight, you try to line it up with the center line of the landing area. You have 20 seconds.

The meatball is high and you know you aren't going to make a good pass but the tailhook finally grabs the last wire and you plunge forward in your harness straps. You're back in the nest.

You're directed to taxi to the bow and the plane captain is there with tie-down chains draped about his neck.

You climb out of your bird and limp off ready for chow and a long, long sleep. —Robert Neil.

FLOATING HOME—USS *Shangri La* (CVA 38) cruises Pacific. *Rt.*: *Crusader's* tail hook brings jet to a halt.

'MULE SKINNER'—Mule parks an overnight visitor.

They Keep 'Em Flying

Whether washing planes or tying them down, fueling them, taxiing them, or employing hand signals so a pilot can have another pair of eyes, members of the 25-man line crew at NAS Memphis, Tenn., work towards two goals—proficiency and versatility.

These goals can be reached only through proper training and lots of hard work.

It's the job of LTJG Shep Crigler and his assistant, Willie Cole, ADC, to set up and supervise the training of all line crew members and to produce capable, reliable plane captains. And with more than 150 naval aviators on shore duty doing their proficiency flying in six different types of Memphis-based aircraft, there's enough work to go around.

Each of these fliers regularly entrusts his well-being to the air station's line crew. Once a shore-based aviator leaves his office and heads for a plane tended by the line crew, he assumes that the plane has been checked over by one of them. As an added safety check the pilot repeats the process with a plane captain before beginning the flight. It's the plane captain's responsibility to see that every pilot gets a safe, airworthy plane.

Under the Crigler-Cole training program, it takes about four months to qualify a man for the designator of plane captain on any one type of aircraft. The pinnacle of training is reached only when a man has qualified as plane captain on all six types at NAS.

PLANE Captain G. Valania, AD3, inspects controls.

READY—A. Chapman, AN, gives signal to turn up the engine. *Below:* W. Cole, ADC, briefs his line crew.

PILOT checks over plane before proficiency flight.

SCHEDULE BOARD at Pacific Missile Range Headquarters, Point Mugu, Calif., shows day-to-day operations.

Traffic Cops of the Missile Beat

At the Pacific Missile Range these days, closed circuit television's eye is on the *Sparrow*. And on *Nike-Zeus*, *Project Mercury*, and most everything else that flies in that bailiwick, too.

PMR's Range Scheduling Department, you see, has a problem. As Assistant Scheduling Officer, LT Bill Appley, USN, puts it: "Everybody wants to play in our sandbox." These sandbox denizens aren't really playing, however—most of them have something they want to blast off and fly around for varying amounts of time. It's Range Scheduling's job to see to it that these operations don't conflict or interfere with each other.

Obviously, keeping track of more than 10,000 national and international projects each year—that's an average of some 30 per day—is an exacting task. To help do it, Range Scheduling utilizes a massive plexiglass schedule board and a closed circuit television system.

In essence, Range Scheduling's task closely resembles that of the control tower at a metropolitan airport. However, in addition to the aircraft a civilian control tower must contend with, RSD must also coordinate all missile support operations and ship movements within the Pacific Missile Range.

Range Scheduling's jurisdiction extends from Los Angeles up the coast past Point Arguello, and from the coastline to 180 miles out in the Pacific. Frequently, all of this test area is involved in several concurrent operations. Range Scheduling, administering a priority system set up by the Department of Defense, has the final voice on all PRM support operations, and assigns times and areas for each of them.

DATA PROCESSING machines in use at the Pacific Missile Range Headquarters help keep things straight.

The schedule board, a semicircular, lighted plexiglass panel, is designed to accommodate records of all operations requiring PMR support as much as two weeks in advance. In turn, the closed circuit TV transmits a picture of the board to a scheduling conference room. Here, prospective Range users desiring PMR support meet weekly to schedule their respective operations. Viewing the board on TV allows them to submit proposed schedules for their operations which will fit in with activities already slated, make and observe changes, and keep conference time to a minimum. Data processing machines help keep things straight too, and branch scheduling offices at Point Arguello; Kaneohe Bay, Hawaii; and Kwajalein in the Marshall Islands lend added support.

To keep interested authorities up to date on all of these goings-on, Range Scheduling maintains direct lines to the Federal Aviation Agency, Los Angeles; the Naval Missile Facility, Point Arguello; Washington, D. C.; Vandenberg Air Force Base, Calif.; Cape Canaveral, Fla.; and other space and astronautic bureaus. Teletype lines cover downrange facilities, and also link them with foreign activities such as the Woomera Rocket Range in Australia.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

DesRon 36 Gets Around

Not all men who join the Navy get the opportunity to live up to that slogan on the recruiting posters which ends "and see the world." If you're really hot to visit some of those faraway places with the strange sounding names, however, you might consider requesting duty with Destroyer Squadron 36 – an outfit that really gets around.

Soon after joining Task Group Bravo, a crack antisubmarine warfare unit headed by Commander Carrier Division 14 in the aircraft carrier USS *Wasp* (CVS 18), a little over a year ago, for example, two DESRON 36 ships – the escort destroyers *R. L. Wilson* (DDE 847) and *Damato* (DDE 871) – chased, overtook and finally escorted the Portuguese ship *Santa Maria* (which had been boarded and captured by raiders on the high seas) to Recife, Brazil. Then the entire squadron joined up to visit Boston, *Wasp's* home port, before taking off for a joint Canadian - U.S. exercise off Nova Scotia.

A short while later escort destroyer *New* (DDE 818) departed for South Africa on a six-month Amity cruise, which included stops at several ports in Spain, Africa and neighboring islands. While *New* was enjoying this independent duty assignment, the escort destroyers *Holder* (DDE 819), *Rich* (DDE 820) and *R. A. Owens* (DDE 827) plus *R. L. Wilson* and *Damato*, joined *Wasp* on a midshipman training cruise to the Mediterranean. Operating with the Sixth Fleet, they visited Barcelona, Spain; Genoa, San Remo and La Spezia, Italy; Cannes, France; Sicily and Sardinia. Meanwhile, escort destroyer *Basilone* (DDE 824) carried another group of midshipmen on a training cruise to Quebec.

Autumn of 1961 found the entire squadron reunited once more in Norfolk. It was here that the destroyer *McNair* (DD 679), reactivated from the Reserve Fleet and complete with a Ready Reserve crew called to active duty from the Philadelphia, Pa., area, joined the squadron. *McNair* soon steamed south to Guantanamo Bay, Cuba, for refresher training, then joined other Second Fleet units patrolling off the shores of the Dominican Republic. Other DESRON 36 ships, meanwhile, put in to New York City for a short stay.

Early 1962 found DESRON 36 deployed from Florida to Bermuda, participating in one of the early attempts to send Lieutenant Colonel John Glenn into orbit around the earth. Two weeks of tender availability followed; then it was back to the Bermuda area once more in mid-February for Lieutenant Colonel Glenn's successful flight aboard the space capsule *Friendship Seven.*

Then it was off to Portsmouth, England, on the first leg of Task Group Bravo's spring deployment to northern Europe. Tours to London, Winchester, Salisbury, Southampton and Stonehenge gave DESRON 36 sailors a chance to absorb much of the culture and hospitality of the British Isles, while later stops were also scheduled for Rotterdam and The Hague in the Netherlands; Brussels, Belgium; and major ports in Norway, Scotland and Ireland.

MANY TIMES DOWN—USS *Sabalo* (SS 302) celebrated her 3000th dive this summer while operating off the southern coast of Japan.

YESTERDAY'S NAVY

On 3 Aug 1886 construction of USS *Maine* was authorized. On 9 Aug 1815 Tripoli agreed to end its raids on American shipping after a show of force by Commodore Stephen Decatur's squadron. On 15 Aug 1944 an Allied naval force landed U.S. and French troops in southern France. On 19 Aug 1812 USS *Constitution* defeated HMS *Guerriere* in a frigate duel southeast of Halifax. On 31 Aug 1842 Congress established the Bureaus of Yards and Docks; Construction, Equipment and Recruiting; Provisions and Clothing; Ordnance and Hydrography; and Medicine and Surgery.

From SN to LTJG on Same Ship

When LTJG Joseph J. Harnadek, USN, received a set of transfer orders from the oceanographic survey ship USS *San Pablo* (AGS 30) recently, it wound up more than five years of service, spread over two separate tours, for him aboard that ship.

For LTJG Harnadek, however, detachment from *San Pablo* meant more than the normal wrench almost anyone would feel at the thought of leaving a ship which had been home for that much of his life. *San Pablo*, you see, has also been a lucky ship for him.

During his first tour aboard—a three-and-a-half-year stretch from 1951-54—he made every rate from seaman to quartermaster first class. He left *San Pablo* for a considerable spell then and in 1960, while serving in USS *Camp* (DER 251), he was commissioned ensign.

Jaygee Harnadek returned to *San Pablo* in late 1960, and during his current tour he not only received his promotion to LTJG, but has also been administratively advanced to chief quartermaster.

Mr. Harnadek's present orders call for him to report to the Fleet minesweeper USS *Prowess* (MSF 280) as O-in-C. It's a cinch, though, that he'll always have a soft spot for *San Pablo*.

Hydrofoil Landing Craft

The Navy gave a public demonstration of the *Highlander*, its new LCVP(H) (Landing Craft Vehicle Personnel, Hydrofoil), which is capable of traveling in excess of 35 knots—three times the speed of its World War II counterpart.

QUEEN of Seattle Sea Fair, Linda Jewell, pays call on RADM Nels C. Johnson on board *USS Estes* (AGC 12).

The new *Highlander* is 40 feet long and 29 feet wide with its foils lowered. When the foils are retracted, it is 14 feet wide. With a full 6000-pound payload, the craft weighs 28,000 pounds.

The boat is powered by two 275hp engines and all controls are hydraulically actuated, permitting it to be operated with a minimum of effort and training. In case of hydraulic failure, alternate mechanical systems are available.

The new craft is being assigned to the amphibious forces to further evaluate its capability and suitability as a cargo-personnel carrier and swimmer recovery craft.

FAIR STEAMING—USS *Estes* (AGC 12) arrives at Seattle, Wash., for World's Fair. The 600-foot 'space needle' stands in the background.

Carrier Pilots Go on TV

Closed circuit television has been installed in the carriers USS *Kitty Hawk* (CVA 63) and *Coral Sea* (CVA 43) to assist pilots and landing signal officers during qualification flights. The system is called PLAT (short for Pilot LSO Landing Aid Television).

PLAT records each landing on video tape, playbacks of which are used to evaluate pilot performances. Also, the "live" TV picture of the plane coming in for an arrested landing assists the LSO in talking the pilot down safely.

PLAT is comprised of three TV cameras and recording equipment. One camera is located in the centerline of the carrier's flight deck about 300 feet from the last arresting wire. (Some redesigning of deck fixtures was necessary to eliminate the possibility of aircraft tail hooks ripping off the camera cover.)

The lens of the deck camera is separated from other components by a periscope-like device which is stabilized by signals from the ship optical landing system. The camera is immune to shock and vibration, and can be used in day or night operations.

A second camera focuses on control room dials which indicate time, date, radar evaluation of flight speed, and wind velocity, all of which are added to the picture of the aircraft which is viewed in PLAT Control.

The third camera—equipped with a zoom lens for close-ups of flight deck activity—is located in the island structure. Normally, this camera follows the aircraft after it passes over the centerline camera, zooms in for a close-up of the nose number, and follows the arresting wire back to its sheaves.

Going to the World's Fair?

If you intend to visit the Seattle World's Fair this summer or fall, plan to wear your uniform. It will save you some money.

World's Fair officials have announced that all U. S. and visiting foreign military personnel in uniform will be admitted to the fairgrounds for one dollar—half of the regular admission price.

The reduced admission price *does not* apply to any dependents and/or guests accompanying you—they will have to pay the regular freight. And remember, you must be in uniform to take advantage of the special rate.

Ninth Ballistic Missile Sub

The Navy's Fleet ballistic missile submarine, USS *John Marshall* (SSBN 661) was commissioned in May at Newport News. Two other FBM subs have been launched and 18 are either under construction or authorized.

The new submarine was named for Chief Justice John Marshall who served on the bench of the Supreme Court from 1801 to 1835—the longest term as Chief Justice in the history of the court.

Chief Justice Marshall was instrumental in establishing many of the legal procedures of the United States and was particularly influential in establishing the authority of the national government over that of the individual states.

John Marshall is an *Ethan Allen*-class submarine. She is 410 feet long and displaces 6900 tons. She is, of course, designed to fire *Polaris* missiles.

Oceanographic Research Ships

Two of the first United States Navy ships constructed especially for oceanographic research have been launched at Jacksonville, Fla., and Sturgeon Bay, Wis. They are *Robert T. Conrad* (AGOR 3) and *James M. Gilliss* (AGOR 4).

Both ships are 209 feet long and can carry 22 officers and enlisted men in addition to 15 scientists. *Conrad* will be operated, under contract to the Office of Naval Research (ONR), by the Lamont Geological Observatory of Columbia University.

The Military Sea Transportation Service will operate *Gilliss*. The U.S. Navy Hydrographic Office will provide *Gilliss* with scientists to conduct studies of underwater acoustics for the U.S. Naval Underwater Sound Laboratory's East Coast laboratories.

The ships will, among other things, study the effects of the ocean environment on sound transmission and on scientific and naval instruments.

Conrad is named for the late Captain Robert D. Conrad, USN, who pioneered policies and research programs for ONR.

Gilliss is named for Captain James M. Gilliss, USN, who participated in the planning and establishment of the first Naval Observatory in 1844. He also was an early superintendent of the Observatory.

The new *Gilliss* is the second ship to bear the name, the first being a survey ship (AGS-13) which saw naval duty from 1943 to 1958.

Do You Have a Photogenic Ship?

Take a look at the picture here and the one on the inside back cover.

Nice pictures, aren't they? The sort every photographer wishes he had done.

If you should ever produce photos of comparable excellence, you and your ship will have a chance at immortality of a sort. The Curator of the Navy is looking eagerly for such photos of all types of ships so that they will be properly remembered in the future.

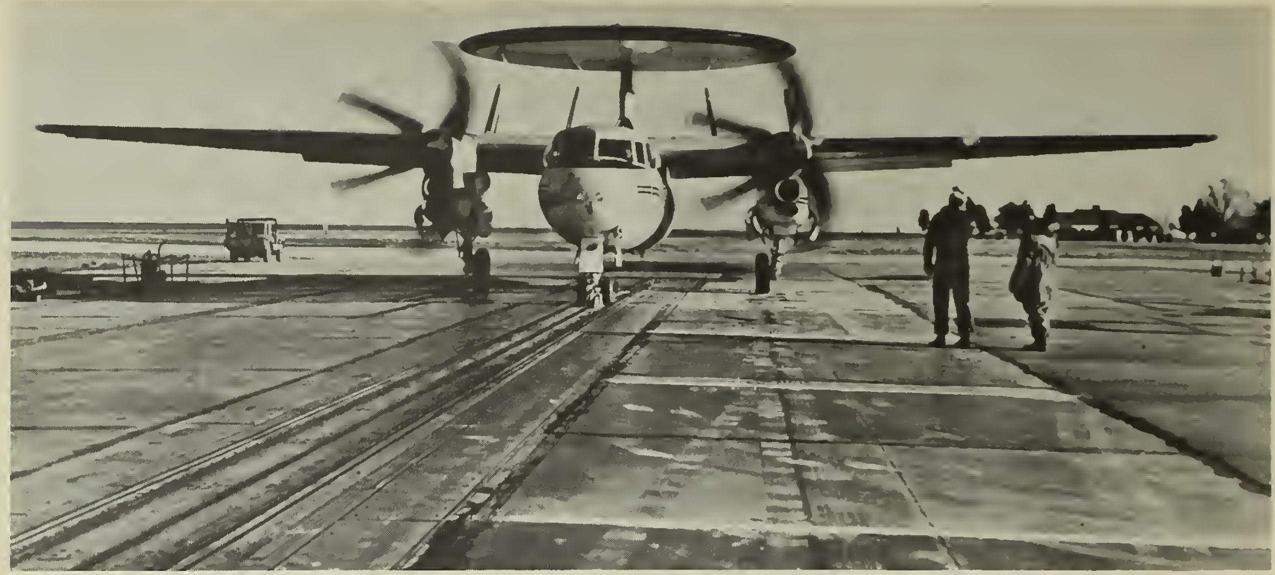
He receives dozens of requests every month for photographs of ships. Some of these requests come from former crew members or surviving families. Others are requests for use in books, magazine articles, museums and school displays and exhibits. The reasons for such requests are limited only by man's imagination and needs.

Several recent requests have been filled for crews of ships named for historic ships of the past. (*Enterprise* herself is a case in point.)

Photographs of your ship, especially during significant events such as visits to foreign ports, humanitarian relief actions, or similar incidents, should be sent to the Curator for the Department of the Navy, Naval History Division, Navy Department, Washington 25, D. C.

And, of course, while you're at it, don't forget to send 8 by 10 glossy copies of your photos along to Editor, ALL HANDS, Room 1809, Arlington Annex, Navy Dept., Washington 25, D. C. This will enable us to show to the rest of the Fleet what a fine ship or station or crew you're associated with.

And, finally, remember the rules regarding the forwarding of negatives to the Naval Photographic Center, Anacostia, D. C.



ON THE NOSE—Navy's W2F-1 is used in testing of new nose-tow catapult system at NAS Patuxent River, Md.

Lex Leaves the Pacific

USS *Lexington* (CVA 16), after 19 years in the Pacific, has changed her address to Pensacola, Fla. Her former home berth at San Diego is being filled by USS *Constellation* (CVA 64).

Lexington appeared in the Pacific in 1943 to take the place of her namesake (CV 2) which was sunk by the Japanese at the Battle of the Coral Sea.

In 1955, *Lexington* was recommissioned at Puget Sound Naval Shipyard after she was fitted with an angled flight deck, steam catapults and mirror landing systems. She returned to the Pacific that same year.

As a member of the Seventh Fleet, she alternated between carrier qualifications off the west coast and deployment in the Far East.

New Sub Tender

USS *Hunley* (AS 31), the first submarine tender built by the U.S. Navy since World War II, and the first in history built from the keel up to service and maintain Fleet ballistic missile submarines, was commissioned in mid-June at Newport News, Va.

The new sub tender is the second ship to bear the name *Hunley*. The first was a Confederate submarine named for its financial backer, wealthy Tennessean Horace L. Hunley. In February 1864, *Hunley* became the first submersible to sink another ship—the Union sloop *Housatonic* in Charleston harbor.

Six hundred feet long, and weighing 18,300 tons, *Hunley* is capable of making any submarine repair other than a major overhaul, including servicing and maintaining the nuclear power plants of the *Polaris*-firing submarines. She is commanded by Capt. Douglas N. Syverson, USN, and is homeported at Norfolk, Va.

Navy Amphibs Train Army

A series of training operations now underway at the Amphibious Base in Little Creek, Va., will provide instruction and practical work in amphibious assault techniques to improve the amphibious capabilities of today's Army.

The operations—divided into 10 segments—commenced in May and will continue through mid-October. It is the largest joint service training program ever conducted at Little Creek. Altogether, approximately 20,000 Army troops will participate.

FAMILY of Max Lemasters, ACCM, USN, arrives in England. They were the first to enter Europe since the travel ban was lifted.

Army battle groups comprised of combat engineers, infantry, artillery and armor personnel are participating.

First, the soldiers concentrate on the preparations necessary both ashore and afloat for a successful amphibious assault landing. Shore-based training includes vehicle waterproofing, equipment stowage, indoctrination in ship characteristics, net embarkation, assault boat landing, logistical support techniques, and shore party organization.

In the afloat phase, the soldiers are introduced to shipboard life and are provided with on-the-spot instruction in the embarkation procedures necessary for an effective amphibious assault landing.

Veteran Navy and Marine Corps amphibious experts are instructing the soldiers in "hit the beach" techniques. Each of the 10 training periods is climaxed with an assault on Little Creek beach areas.

The first wave of soldiers involved in the training—2000 officers and men of the 2nd Infantry Division, Fort Benning, Ga.—arrived at Little Creek on 12 May. Other Fort Benning battle groups totaling 8000 men followed during June and July.

Still more Army units scheduled for the amphibious training are due later this year from Fort Riley, Kans.; Fort Bragg, N. C.; Fort Sill, Okla.; Fort Hood, Texas; and Fort Campbell, Ky., in increments of 2000.

Grant, Jackson, Greene & Co.

Three Fleet ballistic missile submarines which are now abuilding have been assigned names. They are SSBN 631 which will be named *Ulysses S. Grant,* SSBN 634 which will be christened *Stonewall Jackson* and SSBN 636 which will bear the name *Nathanael Greene.*

When they are commissioned, they will become the 24th, 25th and 26th FBM submarines in the Fleet.

Ulysses S. Grant will, of course, bear the name of a one-time colonel of the 21st Illinois Volunteer Infantry. Later, his tenacity in pursuing the enemy at Shiloh and elsewhere prompted President Lincoln to place him in command of all Union forces. He became the 18th President of the United States in 1868.

Stonewall Jackson will bear the name of the Confederate general and tactician who earned his nickname from the words of Brigadier General Bee who, during a battle, encouraged his men by pointing out Jackson, "standing like a stone wall."

Nathanael Greene was the general whose dividing and eluding tactics contributed to the British defeat by forcing them to pay a price they could ill afford during the Middle-Atlantic and Southern campaigns of the Revolution.

All the new submarines will be in the *Lafayette* (SSBN 616) class and will be 425 feet long and displace 7000 tons.

All three FBM subs are scheduled to join the Fleet late in 1964.

First Combat Store Ship

The keel was laid in San Diego for the Navy's first combat store ship (AFS 1). The new ship is scheduled for delivery to the Navy late in 1963. A sister ship will be delivered about June of the following year.

Both ships follow a new design and will be 581 feet long and 79 feet wide. They will be equipped with automatic tensioning devices which will maintain taut transfer lines between the AFS and the ship being replenished.

The ships will displace 16,100 tons fully loaded and will carry helicopters for replenishment of task force ships spread over a wide area.

Eventually the new floating warehouses are expected to replace the store ships (AF), general store issue ships (AKS), and aviation supply ships (AVS) now used in most underway replenishment operations.

TWO SHIPS are refueled at the same time by USS *Platte* (AO 24).

Oilers Have Busy Job Feeding the Fleet

A Fleet oiler is to a ship at sea what an isolated service station is to a motorist whose engine is sputtering on a lonesome stretch of road.

Take the Pacific Fleet, for example; it embraces more than 400 ships and 3000 aircraft. Fleet oilers and gasoline tankers keep ships and planes from running out of the vital stuff at embarrassing moments and, in mid-Pacific, almost any moment would be embarrassing.

Several varieties of oilers now replenish Pacific Fleet ships at sea. The smallest, *Kennebec* (AO 36) class, were pulled out of mothballs during the past year, dusted off and put back to work. Each ship of her class is about 501 feet long and displaces about 21,000 tons fully loaded. Despite their size, they carry nearly as much fuel as some of their slightly larger sister ships in the *Mattaponi* (AO 41) class.

More numerous are the oilers displacing 25,000 tons fully loaded. Each of these is 553 feet long, is armed with 5-inch/38 and 3-inch/50 guns, and carries more than four million gallons of fuel.

The largest class is represented by three giants, each of which displaces 38,000 tons fully loaded, and is about 655 feet long. An oiler in this class can carry more than seven million gallons of fuel.

Tankers carrying gasoline are smaller than oilers and consequently carry less fuel. They usually transport their cargoes from port to port rather than refuel at sea.

Regardless of its size, the sight of an oiler bobbing about on the briny blue is a pretty sweet sight to the captain of any ship whose fuel gauge is creeping up on the "E," which, of course, means "empty."

FLEET OILER in rough seas sends both fuel and cargo to carrier.

LONG TIME GONE—*USS Saint Paul* (CA 73) heads for home port at San Diego, Calif., after more than three years in Western Pacific.

Navy Astronautics Group

The U.S. Navy's first space satellite command, the Navy Astronautics Group, has been established at the Pacific Missile Range Headquarters, Point Mugu, Calif. It will operate the navigational satellite system which is being developed by the Navy for the Department of Defense.

The Group will maintain and operate certain astronautics systems which will include spacecraft, ground-based components and subsystems. The new command will eventually have a satellite command and injection station, computer center, operations control center and satellite tracking facility at Point Mugu. Other command tracking facilities will be located at Winter Harbor, Maine; Minneapolis, Minn.; and Wahiawa, on Oahu, Hawaii.

Navymen Pile Up Records in Phantom II Jet

Navy test pilots have swooshed the F4H *Phantom II* jet fighter to eight new world aviation speed records in the "time-to-climb" category. The records were chalked up by five pilots—four Navymen and one Marine—during speed trials at the Naval Air Stations at Point Mugu, Calif., and Brunswick, Maine. The climbs were to altitudes of 3000, 6000, 9000, 12,000, 15,000, 20,000, 25,000, and 30,000 meters. Here's how they stack up:

Altitude in Meters	*Time-to-Climb (in seconds)*	*Pilot*
3000 (9842.5 feet)	**34.523**	**LCDR J. W. Young, USN**
6000 (19,685 feet)	**48.787**	**CDR D. M. Longton, USN**
9000 (29,527.5 feet)	**61.629**	**LTCOL W. C. McGraw, Jr., USMC**
12,000 (39,370 feet)	**77.156**	**LTCOL W. C. McGraw, Jr., USMC**
15,000 (49,212.5 feet)	**114.548**	**LCDR D. W. Nordberg, USN**
20,000 (65,620 feet)	**178.5**	**LCDR F. T. Brown, USN**
25,000 (82,025 feet)	**230**	**LCDR J. W. Young, USN**
30,000 (98,425 feet)	**371.43**	**LCDR D. W. Nordberg, USN**

The Navy has submitted the new time-to-climb statistics to the Federation Aeronautique Internationale—the Paris-based organization which governs world aviation records. If accepted, the marks will erase the course times set by the Air Force now recognized as records.

Five other world speed marks have been claimed by the *Phantom II*—including the straightway speed record of 1606.3 miles an hour. The sleek fighter has also set records in the 100- and 500-kilometer closed courses; altitude for sustained flight; three-kilometer run; and U.S. coast-to-coast time of two hours, 48 minutes.

The *Phantom II* is powered by two turbojet engines which can develop more than 32,000 pounds of thrust (rough equivalent: 120,000 hp.).

Slick features of the *Phantom II* are her 45-degree swept-back wings and a horizontal stabilizer that slopes downward at a 23-degree angle. The jet is 58 feet in length and has a wingspan of 38 feet, five inches.

Orion Reports for Duty

The first three of 22 *Orion* antisubmarine aircraft scheduled to begin squadron duty this year were delivered to NAS Patuxent River, Md., in July.

The new *Orion* carries a 10-man crew and flies at speeds up to 450 miles per hour. At first it will supplement, then replace, older models of the veteran P2V *Neptune*.

Since April, six *Orion* sub-killers have been under test both over land and over the ocean. A Naval Weapons Evaluation Force team has made flights over New Mexico desert armament ranges to make bomb and torpedo drops and fire rockets in a complete check-out of *Orion's* weapons delivery system.

Two of the Patuxent-based planes were given maintenance, ground support and servicing tests. Other *Orions*, using science's most advanced electronic, sonic and magnetic gear, were used to test the plane's underwater detection capabilities.

Navy Launches FLIP

A new type of Navy oceanographic research vessel has been launched. Called FLIP, the craft can literally flip from a horizontal to a vertical position while at sea.

In a vertical position FLIP will provide the stable platform long needed by oceanographers, particularly in rough seas.

It will be used for studies of wave motion, marine biology, internal waves, sound waves and other phenomena in the ocean. It will be used initially for studies of sound waves.

The vessel is towed to sea in a horizontal position then rotated into a vertical position by flooding its long aft section with sea water. Only its four-story bow section then remains above water. To return the vessel to a horizontal position, high pressure air blows the water out. Subcompartmentation of the ballast tanks and about 70 tons of concrete placed along the horizontal keel permit the vessel to return to a horizontal position.

The craft is 355 feet long and weighs about 600 tons. In the vertical position, the research laboratories, living quarters and engine room are above water. Two watertight cylindrical tubes permit the crew to descend to 150 feet under water.

There are accommodations for four persons and supplies can be carried from one to two weeks.

CREWLESS—Fire-swept SS *Iquitos* from Peru drifts in the Pacific some 4000 miles from where abandoned.

Navy Flight Crew Finds Mystery Ship

But tell me, tell me! speak again,
Thy soft response renewing—
What makes that ship drive on so fast?
What is the ocean doing?
—"The Rime of the Ancient Mariner"

Salty sailormen will tell you that nothing much is impossible on the high seas. The vast Pacific has recently yielded up yet another example.

When a modern *Flying Dutchman* of sorts (sans crew) popped up in the middle of the restricted nuclear test area near Christmas Island the past spring, it first showed up as an unidentified blip on the radarscope of a patrolling P2V. That blip eventually turned out to be a ship—a real mystery ship.

It was, it developed, the Peruvian cargo ship ss *Iquitos*—but that just couldn't be. *Iquitos* didn't have any business being within thousands of miles of that area.

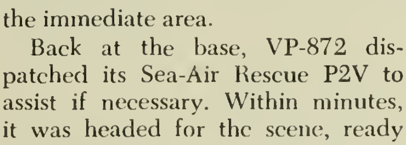
She had, you see, caught fire and started to sink some 300 miles southeast of Acapulco, Mexico, late last November. Her 36-man crew had abandoned ship, and were subsequently rescued by a passing British freighter. *Iquitos,* naturally, was assumed to have sunk.

Still, undeniably, there was the ship—and Flight Crew No. Six, a unit of Naval Reserve Patrol Squadron 872, wheeled in to investigate the strange blip.

Flight Crew Six, of course, had never heard of *Iquitos.* Upon visually sighting their find, they at first believed her to have been recently abandoned, since she was still burning. However, after circling the rusted and fire-scarred vessel, and photographing her devastated superstructure, they were able to determine that there were no survivors in the immediate area.

Back at the base, VP-872 dispatched its Sea-Air Rescue P2V to assist if necessary. Within minutes, it was headed for the scene, ready to drop survival equipment. Meanwhile, Flight Crew Six flew upwind from *Iquitos,* and began to carry out a survival search pattern.

In the meantime, the destroyer USS *Gurke* (DD 783), also notified of the discovery, had reached the scene, and identified the burning derelict as *Iquitos. Gurke* also verified the fact that there was no one on board the craft, and reported her as listing 20 degrees. unsalvageable, and a menace to navigation. This report was sent back to Pearl Harbor, where the strange facts of the voyage of *Iquitos,* and the true fate of her crew, were ascertained. *Gurke* was ordered to sink the drifting wreck—and did so.



UNSALVAGEABLE—SS *Iquitos* was ruled a menace to navigation and sunk by U.S. destroyer's gunfire.

Now Navy Headquarters, Pearl Harbor, is a pretty hardheaded, unfanciful-type outfit—and, sparing the romanticism, and in the absence of any evidence to the contrary (like a murdered albatross, maybe) they've gone along with what seems to be the only possible explanation for *Iquitos'* presence near Christmas Island.

Instead of sinking shortly after her crew abandoned her, the smoldering hulk apparently caught the same Humboldt Current which carried the raft *Kon Tiki* on its epic voyage from the coast of South America to the Polynesian islands some years ago. She had drifted, undiscovered and still burning, some four months and nearly 4000 miles across the Pacific.

Recalled to active status during the Berlin-crisis buildup last fall, VP-872 was the only Naval Reserve squadron assigned to the mid-Pacific nuclear testing program. For at least one of its flight crews, the high point of their tour will always be the discovery of a modern *Flying Dutchman* in the middle of the broad Pacific.

No one can really quarrel with Pearl's explanation, but sometimes we can't help but wish it wasn't quite so realistic. A mutiny and a heroine is, at least, indicated.

SERVICESCOPE

Brief news items about other branches of the armed services.

WEATHER REPORTING in the western Pacific—of deep interest to every U. S. Navy ship in the area—is assigned to a variety of units and stations both ashore and afloat. One of the most widely traveled and versatile of the lot is the U. S. Coast Guard Cutter *Matagorda* (WAVP 373).

Equipped with modern radar and communications equipment, *Matagorda* is manned by 12 officers, 135 enlisted men and four civilian meteorologists. She also carries a public health medical officer.

When she's about her weather information-gathering chores in WestPac, *Matagorda* sends huge, helium-filled balloons aloft every six hours. A radar reflector attached to the balloon enables the ship's radar to track the balloon, thus determining the direction and velocity of the wind at various altitudes. In addition, a radio transmitter containing sensing elements which pick up and transmit the temperature and humidity of the air is suspended from each balloon. All of this information is received and recorded by the ship, transmitted to the U. S. Weather Bureau in Honolulu, and, finally, distributed throughout the Pacific.

Besides serving as a floating weather station, navigational checkpoint, and communications ship for trans-Pacific aircraft, *Matagorda* also participates in the general search and rescue program administered by the 14th Coast Guard District, Honolulu.

Formerly a Navy seaplane tender, *Matagorda* operated from the Atlantic to the Panama Canal Zone during World War II. After the war she joined the mothball fleet at Orange, Tex., for a spell and then, in 1949, shed her Navy grey for Coast Guard white. She is home-ported at Sand Island, Honolulu.

★ ★ ★

AN AIR FORCE TRANSPORT plane, specially fitted as a crop duster, has helped bring under control a plague of locusts which threatened crops in Iran and Afghanistan. The plane, a C-123 based at Pope Air Force Base, N. C., was fitted with a 1000-gallon spray tank for emergency service last May when the governments of the two Middle East countries requested help in combating desert locusts which were threatening farmlands and orchards.

FLOATING WEATHER STATION—USCG's *Matagorda* (WAVP 373) gathers data near Ala Moana, Hawaii.

LIFESAVER—USAF H-43B *Huskie* helicopter hovers as Air Force personnel move into flaming 'crash' area.

The aircraft arrived in Iran on 10 May and began spray operations in the Isfahan and Dezful areas. On 24 May the duster departed for Afghanistan and conducted spray operations there until 2 June.

In all, the C-123, operated by five Air Force officers and two enlisted airmen, sprayed more than 17,000 acres.

★ ★ ★

NASA, the National Aeronautics and Space Administration, will soon have a new and larger spacecraft. Work has begun on the two-man *Gemini* space vehicle which will one day replace the one-man *Mercury* space capsule. *Gemini* is larger in both length and girth and has 50 per cent more cabin space than the *Mercury capsule*. It also will weigh two or three times more than NASA's previous manned capsules.

With *Gemini*, NASA hopes to pioneer a new type of space exploration. *Gemini* is designed to hook up to another space vehicle while in orbit. Two men will be able to orbit the earth for a week or more in *Gemini*. This will not only provide time to maneuver into rendezvous position with another space vehicle, but will also provide pilot training for future NASA circumlunar flights. Prolonged orbital flights will also show how man withstands weightlessness for extended periods, as well as give *Gemini's* crew time to perform a variety of scientific investigations.

Gemini will look much like a large *Mercury* capsule, except that the 16-foot escape tower will not be used in *Gemini*. Instead, ejection seats will be installed as a means of escape during lift-off and re-entry. The outside of the capsule is not the only place where *Gemini* and *Mercury* have been crossbred. Time necessary for development of the two-man vehicle has been reduced by using many of the flight-proven *Mercury* systems. The inside of the *Gemini* capsule is considerably different from that of the *Mercury* capsule. Many of the flight systems will be placed outside the pressurized cabin and many major components will be mounted on removable shelves. This should reduce maintenance and checkout time.

A modified *Titan II* launch vehicle is slated to boost the *Gemini* capsule into orbit for its rendezvous with a target, probably an *Agena* stage similar to those used in *Ranger* and *Discoverer* projects.

This *Agena* stage will be boosted into orbit by an *Atlas* missile. As both vehicles orbit in proximity, the astronauts will maneuver the *Gemini* capsule into position to rendezvous with the *Agena* stage. Ground control will be able to adjust the *Agena's* orbital path, if necessary, so the two crafts can be joined while in orbit.

Gemini ties in directly with NASA's plan to place a man on the moon in 1970. The rendezvous in orbit is one of the projected plans that could lead to such an accomplishment. Another plan calls for the *Nova* booster, with its millions of pounds of thrust, to launch a nonstop flight to the moon.

★ ★ ★

THE AIR FORCE is currently operating ships to provide instrumentation support to missile and space programs on the Air Force Atlantic Missile Range. Ships will be used by the Air Force where islands or land-based instrumentation sites are not available.

New requirements of this nature are being met by the addition of two 520-foot World War II troop transports. These ships are now being modified for their new job and are described as follows:

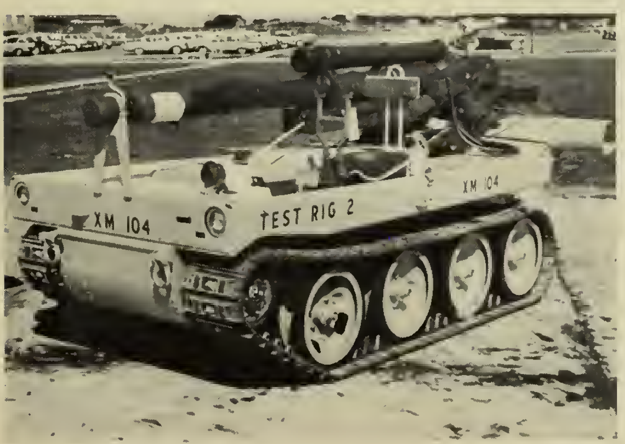
Each displaces 14,300 tons and carries a crew of 100 with an instrumentation group about the same size.

The ships are part of an "Advanced Range Instrumentation Ships Program."

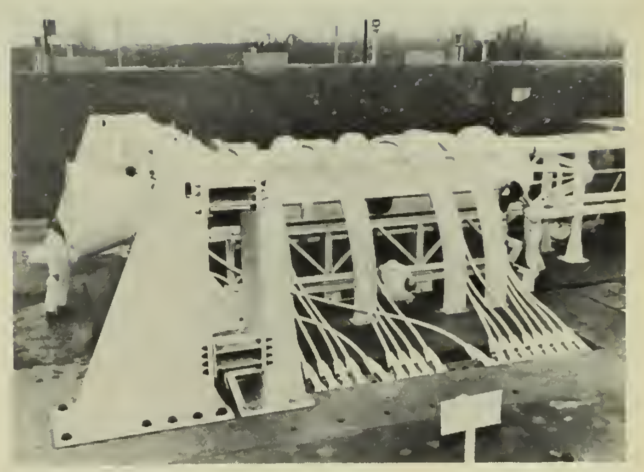
They carry C-band radar, complete telemetry, communications, meteorological and control center systems.

They will also have stabilization and navigation systems, AMR-synchronized timing equipment and vehicle command control systems, in addition to continuous wave transmitters.

The program calls for four additional ships to be used as support vessels, equipped with L, C and X band radars, plus range and range-rate systems.



PILOT MODEL of Army's 105-mm howitzer, the XM 104, represents new concept in self-propelled artillery.



TWENTY-TON solid fuel experimental motor is readied for static test under USAF research program.

THE ARMY HAS STEPPED up its medical research and development activities in an effort to provide better medical support for soldiers under all kinds of battle conditions. A long list of projects on the study agenda of the Army's Medical Research and Development Command will be worked on during a five-year program. Among other things:

- New drugs and vaccines are being tested with a view towards providing soldiers in remote areas with built-in protection against a wide variety of diseases.
- New combat surgery techniques are aimed at reducing deaths and disabilities resulting from wounds, infections, trauma and shock.
- Psychiatrists are being called on to study the soldiers' mental processes and help them adjust to modern combat environments.
- A compound to protect soldiers from the effects of ionizing radiation is being studied.
- New, easily transportable medical field equipment and supplies are under development.

★ ★ ★

PILOT MODELS of a tank-like vehicle which can operate in water as well as on land are under construction by the Army Ordnance Tank Automotive Command in Detroit, Mich. The vehicle—designated XM-104—is built around a 105mm howitzer. The Army describes the weapon as a "heavyweight puncher with featherweight mobility."

The XM-104 is tracked for land operations and amphibious for negotiating rivers and lakes. The machine weighs 6400 pounds, carries a four-man crew, and can travel at 35 miles an hour. The weapon is completely mobile—it can be delivered to battle areas by helicopter, dropped by parachute, or delivered by transport plane. Conceivably, the XM-104 would provide ground troops with an artillery piece which can go into action any place, any time.

Test models of the weapon now under construction must be evaluated and approved by the Army before full-scale production is ordered.

THE BULLETIN BOARD

Family Protection Plan Really Helps To Protect Family

If you're approaching retirement or transfer to the Fleet Reserve, now's the time to check into the benefits of the Retired Serviceman's Family Protection Plan. Under it you may elect to draw a little less retired pay during your lifetime in order to provide a monthly income for your wife and children after your death.

The plan, formerly known as the Uniformed Services Contingency Option Act, has been rewritten. A revised version, which incorporates many changes made late last year, has been distributed to the Fleet in the form of BuPers Inst. 1750.1D. In general, here's how the changes affect you and the FPP:

- If you have three years' service remaining before retirement you may make an original election, a change, or a revocation.
- If your election under FPP is found void for any reason except fraud, it may be corrected anytime within 90 days after you are notified in writing that the election was invalid.
- After you have made a valid election and retired, the Secretary of the Navy may permit you to withdraw from FPP for reasons of severe financial hardship, if your participation would violate equity and good conscience. (The absence of an eligible beneficiary does not in itself constitute sufficient basis for withdrawal.)
- If you have made an election under FPP since 4 Oct 1961, and you retire with physical disability before you complete 18 years' service for pay purposes, then die from a service-connected disability, your beneficiaries will not be eligible for the annuity if they are eligible to receive certain Veterans' Administration benefits. (All premiums you paid into the FPP, however, would be returned to your beneficiaries.)
- You may allocate a part of the annuity to your surviving children who are not the children of your surviving, eligible spouse.

All-Navy Cartoon Contest
John L. Draves, QM2, USN

"After you finish this . . ."

- If you have completed 18 years of service and did not make an FPP election, you may reconsider and still be able to participate.

How It Works

The Family Protection Plan is open to all Navymen and women who expect to receive retired pay (see definitions, page 47). Before you complete 18 years of service you are notified of the benefits of FPP and the deadline for filing your elections. You should be provided a copy of NavPers Form 591, on which you either sign up for FPP, stating the options you desire, or return it and state that you do not wish to participate.

No Dependents?

You have no dependents? Even so, executing an option under the Retired Serviceman's Family Protection Plan would do no harm, since it would insure your dependents if your status changed while you were still on active duty. Deductions from your pay are not made until you actually retire, and if you still have no dependents by that time, you pay nothing.

If you elect to participate in FPP, the NavPers 591 must be dated, signed, witnessed and delivered to your commanding officer (if you're on active duty), or postmarked (if you're inactive), not later than midnight on the day you complete 18 years' service. If your election is not changed or revoked, it becomes effective when you retire. (You do not pay into FPP until retirement—your contribution is automatically withheld from your retired pay.)

If you do not make an election under FPP before completing 18 years' service, you may sign up later provided you do so at least three years before the date you become entitled to receive retired pay.

Effective 4 Oct 1961, if you retire because of physical disability before completing 18 years' service, and your survivors are eligible for "Death Compensation" or "Dependency and Indemnity Compensation," they would not be eligible to receive an annuity under FPP. All money paid in for the plan would be returned to your survivors.

Options

Under the electives of FPP, you may select one or a combination of four basic options and specify whether your eligible survivors will receive monthly checks in amounts equal to one-half, one-fourth, or one-eighth of the reduced amount of your retired pay.

Option 1 is an annuity for your widow; payable until she dies or remarries.

Option 2 is an annuity for your eligible children; payable until eligibility no longer exists (see definitions).

Option 3 is an annuity payable to your widow and surviving children. Your widow's annuity is payable until she dies or remarries, after which it is paid in equal shares to surviving children as long as they remain eligible.

Option 4 provides that no further deductions shall be made from your retired pay when, and if, your family becomes ineligible for annuity payments under options 1, 2 and 3. (A tip: option 4 is good protection to have. If you don't elect to include option 4, you will end up paying into FPP for the rest of your life with no returns to survivors. Option 4 increases the cost of your plan only slightly.)

You may elect the annuities under both options 1 and 2, with either one-quarter or one-eighth of your reduced retired pay payable under each. The reduction in your retired pay and the amount of each annuity are determined separately.

You may not elect combinations of options 1 and 3, or options 2 and 3, for any amount. Option 4 may be combined with any or all other options.

If you elect options 1 and 2, and there ceases to be an eligible recipient of the payments under either one, the annuities do not revert to the eligible survivors under the other option, as could be the case in option 3.

Elections, Changes, Revocations

You may change the terms of your original or subsequent elections at any time before retirement. The change becomes effective three years after it is executed, unless you are retired in the meantime. (Special provisions are made for officers retired under the "Hump Law"—see BuPers Inst. 1750.1D.)

At any time before retirement you may change or revoke your previous election. However, the change or revocation must be in effect at least three years before you become eligible to receive retired pay. You could later make another election, as long as you did so at least three years before you would become entitled to receive retired pay.

All elections, changes to elections, or revocations, are submitted on NavPers Form 591. In each case, the original of the form is sent to the Navy Family Allowance Activity in Cleveland, Ohio. A duplicate copy is inserted in your service record and a triplicate copy is retained by you. (Any one of these may be considered sufficient evidence of an election, change, or revocation, once it has been signed and attested.)

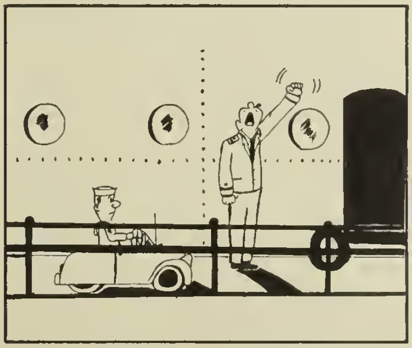
These Definitions Will Give You a Clue

Here's a roundup of some of the definitions relating to eligibility under the Retired Serviceman's Family Protection Plan:

- *FPP* – Retired Serviceman's Family Protection Plan. Formerly known as the Uniformed Services Contingency Option Act.
- *Widow*—Can mean widow or widower, depending, of course, on whether you're a Navyman or a woman. Used here, widow means your lawful spouse on the date of retirement with pay.
- *Children*—For FPP eligibility, the word children (or child) means your children who meet the following requirements on the date of your retirement with pay: Legitimate children under 18 years of age and unmarried; stepchildren under 18 years of age who are unmarried and dependent on you for more than one-half their support (stepchild relationship terminates upon the stepparent's divorce from parent spouse, but not upon death of the stepparent); legally adopted children under 18 and unmarried; and unmarried children over 18 who are incapable of self-support because of physical or mental illness that existed before reaching age 18.
- *Years of Service*—The number of years creditable when computing your basic pay.
- *Retired Pay*—This includes retired, retirement, equivalent and retainer pay.
- *Retirement*—Your retirement with eligibility to receive retired pay.
- *Reduced Retired Pay*—The retired pay remaining after the cost of participating in FPP has been subtracted.
- *Change of Election*—A change in the percentage of the reduced amount of your retired pay under any FPP option, or a change in any of the options selected. (Notification of a substitution, deletion or addition of dependents within an option is not a "change," as the election remains in effect for the same class of dependents selected.)
- *Revocation*—A cancellation of a previous election. Unless another election becomes valid, a revocation constitutes withdrawal from FPP.
- *NavPers Form 591*—"Election of Options Under the Retired Serviceman's Family Protection Plan." This is the official Bureau of Naval Personnel form on which all elections under FPP should be submitted. A revised Form 591 (Rev. 4-62) which reflects changes in FPP is now available at forms and publications stocking points. The old 591s (Rev. 6-54) may still be used, but instructions on the back of the forms which do not reflect changes by new laws should be ignored.

The U. S. Navy Finance Center, Cleveland, Ohio, determines the amount of the reduction in your retired pay, based upon tables which scale percentages for appropriate amounts under the options and ages concerned. The tables currently in effect are contained in NavPers 15945A.

All-Navy Cartoon Contest
James C. McNeill, YN3, USN



"I don't care if it will fit under your rack, you can't keep it aboard."

Not Deductible

The amount of retired pay withheld after your elections under the FPP become effective is not deductible for Federal Income Tax purposes. Your retired pay is considered "gross income" for taxes, unless it is excluded because of retirement for physical disability.

When you sign up for FPP you are required to provide substantiating evidence regarding dependency and ages for eligibility. Your dependents should be named at the time of election or as they are acquired. The dependents you name in each option may be changed up to the date you retire, provided the changes involved are limited to the same option. In any case, on the date of your retirement all legal beneficiaries within the option you elect must be indicated.

Payment of Annuities

When the Navy Finance Center receives official notification of your death after retirement, it will forward to your survivors the necessary information and forms for making application for annuity payments. Annuities for children are paid to the guardian, or, if there is no guardian, to the person who has care, custody and control of the children.

If you signed up under the old Contingency Option Act between 1 Nov 1953 and 4 Oct 1961 you are advised to consult BuPers Inst. 1750.1D for a look at how you stand under the new laws. This directive contains a complete rundown on FPP, including special provisions for men who are missing in action or granted retired pay retroactively. It is the official word, and should also be consulted for more details on points listed above.

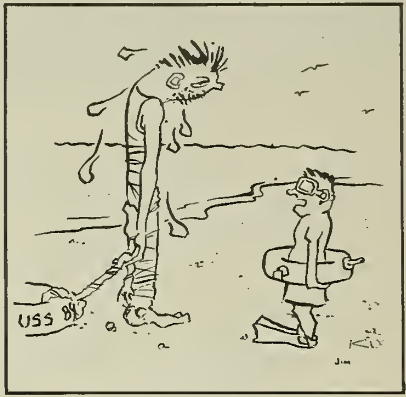
Rules Changed on Voluntary Retirement of Officers

Two changes, which apply to Navy captains and Marine Corps colonels, have been made in the regulations under which warrant and commissioned officers may voluntarily retire after 20 years of active service.

When consistent with service needs, favorable consideration is usually given to retirement applications by officers in the following categories:

- Officers, below flag or general rank, who have 30 years of active service.
- Flag and general officers with 30 years of active service and at least five years in rank.
- Navy captains with at least two years of service in grade (shortened from four years).
- Marine Corps colonels with at least three years of service in grade (also shortened from four years).

All-Navy Cartoon Contest
James E. Krause, SN, USNR



"How's the water?"

- Officers who have twice failed selection for promotion.
- Officers who are difficult to assign because they are over age in grade, are in bad health, or whose continued service is inconsistent with national security.
- Officers having hardship of a compassionate or an unusual financial nature where retirement would alleviate serious personal problems.

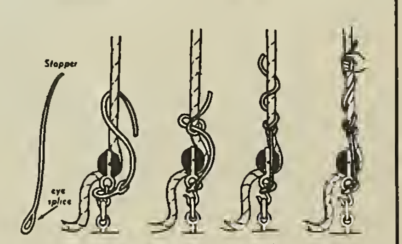
SecNav Inst. 1811.3D, which defines these categories, also points out that officers serve at the pleasure of the President and they have no vested right in retirement after the completion of 20 years of service.

This has always been true but there has been a tendency to ignore this difference in officer and enlisted retirement.

Officers whose skills and backgrounds are especially required by the Navy, who are in receipt of orders, under a payback obligation, or in billets which require the completion of a normal tour of duty would probably find their application for retirement denied.

Generally speaking, officers who meet the criteria listed above will receive favorable consideration.

Grains of Salt —



STOPPING OFF A BOAT FALL

Requests for voluntary retirement should be addressed to the Secretary of the Navy and forwarded via the chain of command and the Chief of Naval Personnel or the Commandant of the Marine Corps as applicable.

The instruction cautions against making the request contingent upon other personnel action. It also suggests that requests be submitted at least three months in advance of the desired date of retirement.

Enlisted men with teaching contracts may submit evidence of such contracts to their commanding officers instead of the items required under Para. 5b and 5c of BuPers Inst. 1910.12C.

That instruction and NavAct 4 contain complete details on early release for prospective students and teachers.

New Officer's Data Card Is Being Distributed

Last month the Bureau of Naval Personnel began distribution of a form which is of prime importance to an officer's career, namely, the Officer Preference and Personal Information Card (NavPers 2774) which was revised last May.

The new forms can be obtained through Navy forms publication and supply distribution points.

As almost everyone knows, processing and storing personnel data has been mechanized. This has increased the accuracy and timeliness of personnel records. However, as BuPers Inst. 1301.25B points out, accuracy begins with the officer whose duty it is to keep current the information on his own data card.

Information on an officer's data card, combined with performance records, qualification requirements and other information are used to determine an officer's future. Therefore, in his own interest, he should make a special effort to keep current such changing items as his dependency status and the curriculum preferences for postgraduate instruction.

New information on how to indicate preference for postgraduate study is included in the new instruction.

The BuPers instruction also contains detailed directions for preparing and submitting the revised Officer Preference and Personal Information Card and a sample copy of it.

Bureau Would Like Your Help With Its Enlistment Program

BuPers. Inst. 1133.3E, recently published, reemphasizes the Chief of Naval Personnel's concern with, and interest in, the Navy-wide reenlistment program.

The new instruction points out that the readiness of the Navy depends upon the retention of well-qualified men and women for career service. Men who entered the Navy just before and at the beginning of World War II are transferring to the Fleet Reserve in ever-increasing numbers. In addition, the experience level is being further depleted through the loss of many critical ratings who were involuntarily extended last year.

Reenlistments, says CNP, should be of paramount importance to every command in the Navy. And the importance of the Career Information Teams and the Career Counselor concept in this field can not be too heavily stressed.

Along this line, the new instruction is specific in stating that the administration of reenlistment programs must be in all cases a command function. However, it adds, BuPers desires and intends to provide all possible technical assistance.

Thus, Enclosure One to the instruction establishes basic requirements for the reenlistment program, while Enclosure Two lists some aids which can be of real assistance in maintaining an effective reenlistment program at your base. Both enclosures are reprinted below in their entirety.

Reenlistment Program Guide

- Career Counselors should be selected and trained as described in the *Career Counseling Guide* (NavPers 15878A). Formal training for Career Counselors can be obtained from the Career Information and Counseling Schools located at Norfolk and San Diego. A main goal is to train one Career Counselor for each shipboard division or the administrative equivalent. In most instances these men will conduct the division counseling on a collateral duty basis.
- The Career Information and Counseling Schools at Norfolk and San Diego convene every four weeks. The course length is three weeks. Training is provided for both Career Counselors and Career Information Team members. (The counselor and team member courses run concurrently.) Upon completion of the course the Career Information Team member is assigned an NEC of 9589, while the Career Counselor is given an NEC of 9588. Quotas may be obtained from the Naval Schools Command, Norfolk, for East Coast activities, or from the Service School Command, San Diego, for West Coast ships and stations.
- Officers and senior petty officers must be fully informed of the importance of an effective reenlistment program (to the Navy and to their own command). Wide use of Career Information Teams is recommended. The success of the Reenlistment Program is directly related to the initiative and interest shown at the command level.
- Career Information and Counseling procedures as outlined below will be conducted by each command to ensure that all enlisted personnel are fully aware of the opportunities and benefits that are available in the naval service. The formal series of counseling interviews are directed primarily to personnel in their first term of service. Although no formal report is required in the case of interviews held with career people, every effort must be made to make sure that they are informed. The following schedule of interviews will be conducted:

Reporting—This interview shall be conducted when a member first reports to a ship or station following completion of recruit training and/or Class "A" School. This transition point from recruit training to the operating Navy provides an excellent opportunity to counsel the man on command regulations and educational opportunities within the Navy. Section II, chapters three, four, five, seven and ten of the *Career Counseling Guide* provide guide lines for this and subsequent interviews.

First Progress—This interview will be conducted one year after the reporting interview, but it will not be held later than after one and a half years of service.

Second Progress—This interview

NOW HERE'S THIS

One for the Birds

The question — "Which came first, the chicken or the egg?" — has plagued man through the ages. Endless debate has raged, but the egg people have never retreated an inch from their position, while chicken fanciers have remained equally adamant.

Now, however, in the unlikely setting of the South China Sea, two ships think they've solved the problem — at least to their mutual satisfaction.

The question arose this time during the recently concluded SEATO maritime exercise *Sea Devil*, in which the navies of six SEATO member nations participated. Seems the captain of the destroyer *USS Lyman K. Swenson* (DD 729) discovered his ship had run fresh out of eggs. It was definitely no yolk as far as he was concerned.

In something less than a trice the CO of the nearby Royal Australian Navy frigate *HMAS Queenborough* heard of his counterpart's plight, and scrambled to the rescue with an offer to send over some eggs. Now Swenson's skipper wanted those eggs, all right, but he didn't want to accept charity, so in true Yankee trader spirit he suggested a swap — frozen chicken for fresh eggs.

The two ships promptly came alongside one another, and highlined the respective goodies onto each other's decks while underway. Then they got back to the business at hand — the training exercise.

Oh, and which came across the highline first? The chicken.

will be conducted after three years of service.

Reenlistment Interview—This interview will be conducted approximately four to six months before expiration of active obligated service. Each man who is recommended for reenlistment must be interviewed. Chapters nine and ten, Section II, of the *Career Counseling Guide* provide information concerning follow-up interviews.

- A NavPers 736 (Rev. 1-62) *Report of Reenlistment Interview,* will be initiated for each man as he reports to a ship or station after recruit training and/or Class "A" School. At the completion of each scheduled interview, appropriate remarks will be entered. Upon transfer of personnel the NavPers 736 should be checked for completeness and forwarded with the service record to the new command. When the man is either reenlisted or separated the form must be completed and forwarded to the Chief of Naval Personnel (Pers-B2211), Navy Department, Washington 25, D. C.

Reenlistment Program Aids

Listed here are aids that should prove directly or indirectly useful in local reenlistment programs. A brief description of each item, together with a notation regarding its distribution, is included where applicable.

Career Orientation—Career Information Teams, usually consisting of an officer, a CPO and a PO1, are capable of making a very effective presentation on the advantages of a naval career. The presentations stress the necessity that all officers and leading POs continually emphasize the benefits and advantages of a Navy career. Individual commands and activities will benefit by making use of these teams whenever opportunity affords.

All-Navy Cartoon Contest
LTJG Horace G. Walker, USN

"And I say it's not fair . . . your section had liberty last year!"

Fleet and district commands are encouraged to submit changes to personnel allowances for authorization of Career Informtion Teams. However, owing to severe limitations of personnel ceilings, it will be necessary to offer compensatory reductions for any increase in personnel allocations. The utilization of teams on a full-time basis in small commands is not considered warranted, providing such commands may be supported by teams from type or district administrative commands.

Career Counseling and Reenlistment Interview Aids—Career Counseling Guide (NavPers 15878A) is a 52-page manual containing instructions for setting up effective interview programs. It explains the use of the *Report of Reenlistment Interview* forms (NavPers 736) and provides guidance for the Counselor. It is considered most suitable as a guide for conducting career counseling and reenlistment interviews required by *BuPers Manual,* Art. C-10103. Originally on all ships and stations distribution, it will be available at normal stocking points.

Career Counselor's kit, is a two-part counseling kit consisting of a presentation folder and collected reference materials, will be available through type commanders and district commandants. The kit has been designed to assist the counselor in conducting career counseling and reenlistment interviews.

Separation and Reenlistment Guide (NavPers 15877) (Rev. 3-62) is a pamphlet containing complete information on the correct procedures and the exact clerical steps to process enlisted personnel for reenlistment. This guide has been distributed to all ships and stations.

Career Information Posters featuring various aspects of a Navy career are distributed approximately every other month on an all ships and stations basis. Also, from time to time pamphlets such as *"Figuring Your Future"* and *"Facts for Figuring Your Future"* are distributed.

Instructions Pertinent to a Reenlistment Program — BuPers Inst. 1130.4 (current series); Subj: Enlistment in the Regular Navy of Naval Reserve personnel serving on active duty.

BuPers Inst. 1133.4 (current series; Subj: Discharge and reenlistment of Regular Navy enlisted personnel within one year of expiration of enlistment date.

BuPers Inst. 1133.11 (current series; Subj: Recommendations for Reenlistment.

BuPers Inst. 1133.13 (current series); Subj.: Selective Training and Retention (STAR) Program.

BuPers Inst. 1440.27 (current series); Subj: Selective Conversion and Retention (SCORE) Program.

Enlisted Transfer Manual, Chap. 12.8—Assignment to School as a Reenlistment Incentive.

ALL HANDS also can have NINE LIVES—if you pass this magazine on for nine other Navymen to read.

List of New and Re-Issued Motion Pictures Available To Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

Stage Fright (1990): Comedy; Jane Wyman, Marlene Dietrich (Re-issue.)

The Iron Mistress (1991): Adventure Drama; Virgina Mayo, Alan Ladd (Re-issue).

Silver Whip (1992): Western; Dale Robertson, Rory Calhoun (Re-issue).

Mr. Belvedere Rings the Bell (1993): Comedy; Clifton Webb, Joanne Dru (Re-issue).

Model and Marriage Broker (1994): Jeanne Crain, Scott Brady (Re-issue).

Sweet Bird of Youth (1995) (C) (WS): Drama; Paul Newman, Geraldine Page.

Five Minutes to Live (1996): Melodrama; Johnny Cash, Donald Woods.

Merrill's Marauders (1997) (C) (WS): War Drama; Jeff Chandler, Ty Hardin.

Thirteen West Street (1998): Melodrama; Alan Ladd, Rod Steiger.

Belles on Their Toes (1999): Drama; Jeanne Crain, Jeffrey Hunter (Re-issue).

Young Man with a Horn (2000): Drama; Kirk Douglas, Doris Day (Re-issue).

The Daughter of Rosie O'Grady (2001): Musical Comedy; June Haver, Gordon MacRae (Re-issue):

Powder River (2002): Western; Rory Calhoun, Corinne Calvet (Re-issue).

The Guy Who Came Back (2003): Drama; Paul Douglas, Linda Darnell (Re-issue).

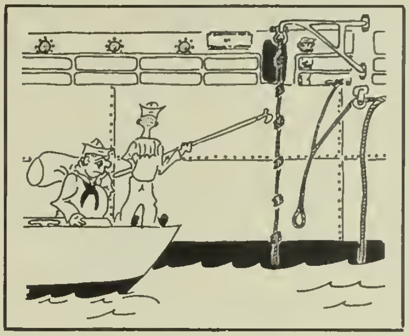
Wabash Avenue (2004): Musical; Betty Grable, Victor Mature (Re-issue).

Oh! You Beautiful Doll (2005): Musical; June Haver, Mark Stevens (Re-issue).

You're My Everything (2006): Musical; Dan Dailey, Anne Baxter (Re-issue).

Satan Never Sleeps (2007) (C) (WS): Drama; William Holden, Clifton Webb.

All-Navy Cartoon Contest
William E. Coss, SM2, USN



"Yeah, this captain sure is a bug on this physical fitness program."

Walk on the Wild Side (2008): Drama; Laurence Harvey, Jane Fonda.

Belle Sommers (2009): Melodrama; David Janssen, Polly Bergen.

Experiment in Terror (2010): Drama; Glenn Ford, Lee Remick.

Everybody Does It (2011): Comedy; Paul Douglas, Linda Darnell (Re-issue).

Way of a Gaucho (2012): Drama; Gene Tierney, Rory Calhoun (Re-issue).

My Pal Gus (2013): Drama; Richard Widmark, Joanne Dru (Re-issue).

When Willie Comes Marching Home (2014): Drama; Jane Frazee, Allan Jones (Re-issue).

Don't Bother to Knock (2015): Drama; Richard Widmark, Marilyn Monroe (Re-issue).

Let's Make It Real (2016): Comedy; Claudette Colbert, MacDonald Carey (Re-issue).

Elopement (2017): Comedy; Clifton Webb, Anne Francis (Re-issue).

Dangerous Crossing (2018): Drama; Michael Rennie, Jeanne Crain (Re-issue).

State Fair (2019) (C) (WS): Musical; Pat Boone, Ann Margaret.

Judgment at Nuremberg (2020): Drama; Spencer Tracy, Burt Lancaster.

Call Me Genius (2021) (C): Comedy; Tony Hancock, Dennis Price.

The Children's Hour (2022): Drama; Audrey Hepburn, Shirley MacLaine.

Up the Creek (2023): Comedy; Peter Sellers (Re-issue).

Track of the Cat (2024): Western; Robert Mitchum, Teresa Wright (Re-issue).

Captain Horatio Hornblower (2025); Gregory Peck, Virginia Mayo (Re-issue).

This Woman Is Dangerous (2026): Drama; Joan Crawford, Dennis Morgan (Re-issue).

Something for the Birds (2027): Comedy; Victor Mature, Patricia Neal (Re-issue).

You're in the Navy Now (2028): Comedy; Gary Cooper, Eddie Albert (Re-issue).

The House on Telegraph Hill (2029): Drama; William Lundigan, Valentina Cortesa (Re-issue).

Return of the Texan (2030): Western; Dale Robertson, Joanne Dru (Re-issue).

Something Wild (2031): Drama; Carroll Baker, Ralph Meeker.

Hands of a Stranger (2032): Melodrama; Paul Lukather, Joan Harvey.

Information Received (2033): Melodrama; Sabina Sesselman, William Sylvester.

Seven New Courses Offered To Officers and Enlisted Men

Six new enlisted correspondence courses and one new officer course have been issued by the Bureau of Naval Personnel, and nine enlisted courses and one officer course have been discontinued.

New Courses

Torpedoman's Mate 3 & 2 (NavPers 91297-B)
Communications Technician (M) 3 & 2 (NavPers 91557)
Journalist 3 & 2 (NavPers 91452-1)
Fire Control Technician 3 (NavPers 91339-1)
Aviation Boatswain's Mate (F) 3 & 2 (NavPers 91679)
Storekeeper 1 & C (NavPers 91433-2)
Nuclear Physics (NavPers 10901-B)

Discontinued Courses

Torpedoman's Mate 3, Vol. I (NavPers 91300-1A)
Torpedoman's Mate 3, Vol. II (NavPers 91296-A)
Torpedoman's Mate 2, Vol. I (NavPers 91302-1A)
Torpedoman's Mate 2, Vol. II (NavPers 91297-A)
Journalist 3 (NavPers 91451-C)
Journalist 2 (NavPers 91452-B)
Fire Control Technician 3 (NavPers 91339-B)
Storekeeper 1 (NavPers 91432-1B)
Storekeeper C (NavPers 91433-1A)
Basic Nuclear Physics (NavPers 10901-A)

Try Roughing It DeLuxe in the Tropical Panama Canal Zone

TROPICAL LIVING with practically all the stateside conveniences—that's what you can look forward to during a tour of duty in the Panama Canal Zone.

The Canal Zone is a tiny strip of land about in the middle of the Republic of Panama. It stretches from the Atlantic to the Pacific Ocean, a distance of about 50 miles, and is only 10 miles wide—five miles on either side of the canal. It runs almost north-south, since the Atlantic entrance of the canal is north and slightly west of the Pacific entrance. At the Atlantic entrance are the two cities of Cristobal, in the Canal Zone, and Colon, in the Republic of Panama. At the Pacific entrance are Balboa, in the Canal Zone, and Panama City, which is the capital of the Republic of Panama.

The Canal Zone is an area granted in perpetuity by the Republic of Panama to the United States for the construction, operation, maintenance and protection of the canal. By terms of the treaty between the United States and Panama, the United States has complete and exclusive sovereignty in the Canal Zone.

The population of the zone is composed mainly of personnel of the Panama Canal Company, the Canal Zone government, the Army, Navy and Air Force, and their families.

The climate is typically tropical, with high humidity and relatively high, but even, temperatures throughout the year. There are two seasons —dry from January to April and rainy from May to the end of December. The dry season is tempered with trade winds which blow almost constantly throughout the four-month period. Temperatures vary little throughout the year, the means ranging from 73 to 87 degrees on the Pacific side and from 73 to 85 degrees on the Atlantic side. Extreme temperatures on the Pacific side are 63 degrees in January or February and 97 degrees in April. The Atlantic extremes are 66 and 95 degrees, occurring in the same months as the Pacific extremes. The rainfall varies greatly between the two sides of the Isthmus. The average annual precipitation on the Atlantic side is 130 inches while on the Pacific side the annual rainfall is only 68 inches. On the whole, the climate is pleasant with cool evenings throughout the year.

All-Navy Cartoon Contest
LT Paul B. Kincade, USN

"Is this where they keep the stern sheets?"

Entry into the Canal Zone—All naval personnel are required to have permission for their dependents to enter the Canal Zone (15th Naval District) whether entry is for establishing residence or to visit. Dependents should not begin to travel to the area until this permission has been granted. Upon receipt of orders to duty in the Canal Zone, Navymen who want their dependents to accompany them should submit a request to COM 15. Permission for entry of dependents will normally be approved if quarters are available.

Commercial transportation is available to and from the Canal Zone by major airlines, via Tocumen airport in the Republic of Panama.

Housing—Naval housing in the Canal Zone is adequate.

Since well-ventilated houses are essential for comfortable living in the tropics, most quarters somewhat resemble "summer type" dwellings in the United States. All open areas are screened, but most are without window glass. Although this type of construction is well-suited to this locality, the new arrival will find that his privacy has been somewhat reduced.

Household Effects—Most government quarters are adequately furnished with the prescribed allowance of furniture, including stoves and refrigerators. Since many types of wood deteriorate in the tropics, and free circulation of air is essential to proper heat control, specially designed furniture is used to meet these two problems.

It is not advisable to ship to the Canal Zone such items as overstuffed chairs, studio couches or large, expensive musical instruments. Books are prey to mildew, and since good libraries are available, only those books felt necessary should be brought. You can make good use of throw rugs for bedrooms or a small cocktail rug for the living room if you have them, and your own pet pictures and wall decorations will make your quarters look like home.

But remember that mildew and termites are problems in the tropics, before you decide to bring any expensive items—including good pictures and hangings. (Extra lamps may come in handy, but are not necessary.)

Excellent silverware, chinaware and table linens are available in Panama and the Canal Zone at prices lower than those in the United States, in case you don't have your own. A kit consisting of the bare essentials of bed linens, towels, dishes, silverware and cooking utensils will be placed in your quarters by your sponsor (see below). The kit may be retained by you until your household effects arrive.

Sponsors—There is a sponsorship program in effect throughout the 15th Naval District. Under the program, your sponsor is assigned by your new commanding officer and will write you, giving any information you may need. Your sponsor will also ready your quarters for your occupancy, including the purchase of immediate food needs, and meet you upon arrival in the Canal Zone.

Hotel Accommodations—There are two modern hotels in Panama City. One is the luxurious El Panama Hilton, on the outskirts of the city proper, where studio-style bedrooms with private terraces are available. Public rooms are air-conditioned. An outdoor patio, swimming pool and cabana club, roof garden and dining room are features of the El Panama Hilton. The International Hotel, in the heart of the city, may be classed as good.

At the El Panama Hilton rates

range from $10.00 to $14.00 per day, single occupancy; $15.00 to $17.00 per day, double occupancy. At the International rates average $6.00 to $7.00 per day, single occupancy; $8.00 to $10.00 per day, double occupancy.

The Tivoli Guest House is a comfortable hotel in the Canal Zone at Ancon, just across the street from Panama City. The Tivoli is open to employees of the U.S. government, including service personnel and their guests. Here the rates are $4.50 to $5.00 a day for a single room with bath, and $6.50 to $7.50 for a double room with bath.

For the most part, hotels are run on the European plan. Some grant a discount to military personnel. The tourist season extends from December through March, and hotel accommodations are usually difficult to obtain during these months.

Automobiles—An automobile is almost a necessity, since public transportation is inadequate. The climate is hard on cars, so it is best not to buy a new car to bring to the Isthmus. Instead, be sure the car you have is in good operating condition (and undercoated) before you leave the United States. Tires, batteries and accessories can be bought reasonably at Panama Canal commissaries and also at Army, Navy and Air Force Exchange garages. Mechanical repairs are slow and expensive. Gasoline costs about 20 cents per gallon in the Canal Zone. It is best to start making arrangements with the Naval Supply Depot, Bayonne, N. J., for transportation of your car as soon as practicable. You may be able to have your car aboard the same transport in which you and your dependents will travel. Canal Zone license plates cost $5.00 per year with half-rates available after 1 July.

A Canal Zone driver's license is required in the Zone, and you'll need one from the Republic of Panama for driving in or through the Republic. In most cases, where a driver has a permit from the state of his last residence, only a written examination is required for the Canal Zone license. The Republic of Panama permit is issued contingent upon this test.

It is advisable, before leaving the States, to make certain your automobile insurance will cover you while driving in the Republic of Panama. If your present policy does not cover you, your company may write an additional clause into the policy. This coverage is necessary when applying for a military base car identification sticker.

Clothing—Clothes suitable for midsummer in the United States are right for Panama. In general, dress is informal, but women may wear gloves, hats and stockings to luncheons and teas. Washable clothing is the most practical for everyday wear, since dry cleaning is rather costly and not always of the best quality. Women leading active social lives (senior officers' wives in particular) will need cocktail dresses and evening gowns. Woolens and furs should be left in the States, except for a few things in case one has the opportunity to visit neighboring high-altitude places. The humidity encourages mildew, especially on woolens, silks and leathers, which should be kept in specially heated closets in the quarters.

The Canal Zone commissaries and the service Exchanges have clothing for the family at reasonable cost. Wider selections are available in the cities of Panama and Colon, but at higher prices than in the States. If your feet are hard to fit, it is wise to bring a supply of shoes with you.

For men, suits of tropical worsted, Palm Beach, linen, seersucker and especially the new wash-and-wear

HOW DID IT START

Homeward Bound Pennant

When it's time for a U. S. Navy ship to return home after nine months or more in foreign waters, a member of the crew (in the absence of a seagoing Betsy Ross) usually gets the job of making a homeward-bound pennant.

The pennant is divided vertically into two parts. The portion next to the hoist is blue, and the fly is divided horizontally into halves — the upper red and the lower white.

The use of such a pennant has grown over the years, and no one seems to know exactly when it started.

The formula for determining the length of the pennant has changed from time to time. Back in 1945, for example, an ALL HANDS feature said: "Today it generally provides one foot of length in the pennant for each man who has been in the ship a year on foreign duty, plus one inch for each man per month over a year. This is why the sub tender, Orion (AS 18), trailed a pennant 400 feet long when she steamed into New York on Navy Day 1945."

At times, we are told, the length of the homeward-bound pennant was so great that it required an inflated hog's bladder to keep the trailing end aloft.

A homeward-bound pennant today is made to specifications set down in *U. S. Naval Flags and Pennants — Descriptions, Uses and Customs* (DNC 27). The color is the same as before. In the blue field is placed one white star for the first nine months that the ship has been continuously on duty outside the United States, plus one additional white star for each additional six months.

The length of the pennant is normally figured on a basis of one foot for each officer and enlisted man on the ship who has been on duty outside the United States in excess of nine months. Where this produces a pennant excessively long, its length is generally kept within practical limits. In any case, the length cannot exceed the length of the ship.

The pennant may be flown when the ship gets underway for the United States and can be displayed until sunset on the day of arrival in a U. S. port of destination. When the ship arrives in the United States, the pennant is divided among the ship's crew. The blue portion, which contains the stars, is presented to the commanding officer and the remainder of the pennant is divided equally among the ship's company.

The longest homeward-bound pennant we've heard of was flown from USS *Augusta* (CA 31) when she returned home in 1940 after seven years in foreign waters. She flew a homeward-bound pennant that measured 700 feet. We don't know whether or not it had an inflated hog's bladder holding it up.

fabrics are popular for off-duty hours.

School children generally dress about like this:

- Grade School Girls – Cotton dresses (short sleeves or no sleeves).
- Grade School Boys—Jeans and open-collar shirts and T-shirts. Some boys do wear shorts.
- High School Students–Clothing as in the United States. Skirts and blouses for the girls—jeans for the boys.

The uniform of the day for officers and chief petty officers is tropical white or tropical white, long. One uniform of service dress blue, one of service dress khaki and all of your whites should be brought along. In addition, you should bring any working khaki you may have, along with all items of the tropical working uniform that are in your possession. All the items of working uniforms are available locally. Officers occasionally need the dinner dress white uniform, which may be purchased locally in case you do not have one.

The uniform of the day for white-hats is whites without jumpers, or white or khaki shorts. Slacks, shorts and sports shirts are worn more than any other items of civilian clothing.

Calls—The newly arrived officer (and his wife) reporting to the staff of Commandant, 15th Naval District, should call on the commandant, chief of staff and the head of his staff section within a few days after his arrival. Arrangements for the call on the commandant should be made in advance through his aide. These calls are considered obligatory. Other officers of the staff are encouraged to exchange calls.

Food—Panama Canal Company commissaries, located in the various Canal Zone communities, are comparable to department stores and are operated under government control. Supplies of all kinds for personal and home use may be bought. These commissaries carry the usual foodstuffs, including cold storage products, meats, fruits, vegetables, cheese, butter, eggs and quick-frozen items. Food is plentiful, but lacking in variety—particularly in fresh vegetables and fruits. Pasteurized milk is available. Canned foods are plentiful, including baby foods.

All-Navy Cartoon Contest
James E. Weaver, Jr., DK3, USN

"Captain, Higgins just completed his 300-yard dash."

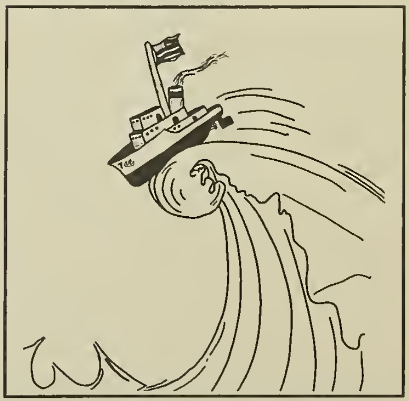
In addition to food, Panama Canal Company commissaries stock clothing for men, women and children; hardware and household furnishings. The commissaries and Exchanges also offer an excellent opportunity to purchase Irish linens and English china of well-known makes in limited supply. Special orders may be placed at the Exchanges.

The commissaries have family laundry and dry cleaning services.

Army, Navy and Air Force commissaries and Exchanges at the various installations offer services similar to those of the Panama Canal Company commissaries and have lunch and fountain service. They carry an interesting stock of goods from Central and South America and foreign countries elsewhere. Navy Exchanges operate a laundry and pick-up and delivery service.

Domestic Help—Household servants are available at wages averaging from $20.00 to $50.00 per month. They may also be engaged on a daily basis for approximately $2.00 to $2.50 per day. There is a maid agency service available at the Army post of Fort Clayton and a maid agency in Panama City. Otherwise, maids may be employed through newspaper advertisements and recommendations from residents. The supply is plentiful, although many are unskilled. Most servants speak English or Spanish. Jamaican or Panamanian seamstresses can be located, some of whom will come to your home to do sewing if you have a machine. Laundresses are available at reasonable rates.

All-Navy Cartoon Contest
Earl A. Hall, DMSN, USN



"All engine back full!"

Medical Facilities—Dependent medical requirements are provided for by the Panama Canal Company. For those stationed at Atlantic-side activities, the Coco Solo Hospital is available. Services on the Pacific side of the Isthmus are available at Gorgas Hospital.

Limited dental service for dependents is available. Treatment will normally consist of those procedures necessary for the maintenance of an already healthy mouth. It is therefore suggested that you have all necessary dental work done on your dependents' teeth before their (the dependents' not the teeth's) departure from the United States.

As a result of the constant vigilance of United States health authorities, the Canal Zone is singularly free from disease, and health conditions are excellent. The water in both Panama and the Canal Zone is pure.

Education—The Canal Zone school system compares favorably with modern school systems in most cities of the United States. Excellent educational facilities are provided from kindergarten through junior college. Graduates of the two high schools have college entrance qualifications. The curriculum of the junior college is comparable to those of junior colleges in the United States. Tuition in the Canal Zone is free to dependent children of United States military personnel from kindergarten through the 12th grade. The school term commences the first week in September and ends the first week in June.

A fee of about $200.00 is required for junior college students. The school term commences the first week in September and ends the first week in June. Special-help schooling is available in Canal Zone schools. School bus service is provided from the quarters area to all Canal Zone schools.

Night extension courses at the junior college at Balboa and at some Army posts are available. Courses include a variety of subjects. Excellent opportunities exist for study of the Spanish language. The YMCA and JWB also offer interesting courses in a variety of subjects.

Religion—Facilities for religious activities are plentiful. Service personnel and dependents may attend services at Army, Navy and Air Force installations, or at churches of the various denominations in the Canal Zone or Republic of Panama.

Money and Banking—The Panamanian unit of currency is the silver balboa, equivalent in value to the United States dollar. United States and Panamanian silver is interchangeable and is used in either the Canal Zone or the Republic of Panama. Since Panama prints no paper money, the dollar is legal tender throughout the Isthmus. There are no currency regulations, and the United States dollar may be imported and exported freely.

The Chase-Manhattan Bank and National City Bank of New York have branches in Balboa and Cristobal which handle all normal banking business. For cashing checks, drafts and the like payable in the United States, a charge of one-fourth of one per cent is made up to $500.00, with a minimum charge of 15 cents. For checks over $500.00 an exchange charge of one-eighth of one per cent is made, with a minimum charge of $1.25. Checks on Canal Zone banks are charged a similar exchange fee when cashed in the States. In order to avoid these charges some families prefer to keep a current checking account in a United States bank. The aforementioned banks do not credit interest on savings accounts.

Recreation—Swimming, golf, tennis and fishing are year-round sports, with the Bay of Panama providing some of the best game fishing in the world. Baseball, softball, bowling, track and range shooting are popular, as are riding and hunting. There is a full program of youth activities —Boy and Girl Scouts, Little League baseball and so forth.

Trips to neighboring regions can be taken by car, plane or boat. You can travel at small cost, and with little effort, to the ruins of the old Spanish fort at San Lorenzo by the mouth of the Chagres River; to the San Blas Islands inhabited by the friendly Cuna Indians; to Taboga Island; and to the interior.

Officers' clubs are located at most Army, Navy and Air Force installations, and clubs for enlisted personnel and their families are available at the large naval activities. Motion picture theaters are conveniently located at service installations, as well as in all Canal Zone townsites.

Good beauty shops are available. Commissaries and Exchanges carry cosmetics, but it is best to bring along a supply of your favorite brand, as there is only a small variety carried in the Canal Zone. A wider selection is available in Panama City.

Pets—Every dog or cat brought into the Canal Zone is held in quarantine four months. During the stay in quarantine the pet will be kept at the kennels in Corozal, Canal Zone, about 15 minutes' driving time from Headquarters, 15th Naval District, at a cost of fifty cents per day. Your pet should be inoculated for rabies before departure, and it will be necessary for you to obtain a statement from a veterinarian that your pets are healthy and free from disease before the pet will be taken aboard the transport. Pet cages are provided on all MSTS vessels at a nominal fee. Transportation of pets aboard MATS aircraft is prohibited.

Birth Documents—Naval dependents should have in their possession a birth certificate (or affidavit in lieu thereof when birth records are nonexistent) or some other documentary proof of citizenship. Such documents must be presented if application is made at a United States Embassy or Consulate for passports to visit Central or South American countries other than the Republic of Panama.

Passports—As stated above, passports are required for entering Central and South American countries other than the Republic of Panama, but they are not required for naval personnel or their dependents for entry into the Canal Zone or Panama.

Communications—Unlimited postal and cable facilities are available. Air mail to the United States takes about two days, and ordinary mail eight to 10 days. Cable, radio and telephone service is available at moderate rates, and service is comparable to that in the United States.

United States postage stamps cannot be used in the Canal Zone. Canal Zone stamps must be purchased for all outgoing mail. Postage rates are the same as in the United States.

HERE'S YOUR NAVY

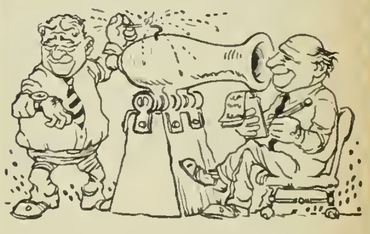
Scientists at the Naval Ordnance Laboratory, White Oaks, Md., have developed an improved method for observing the way explosives act when they are heated to temperatures of 300 to 1000 degrees centigrade. If you're thinking of the thermometer home on the back porch, think in terms of 572 to 1832 degrees Fahrenheit.

Up to now, explosives have gone to pieces so fast at these temperatures that scientists have been more or less in the dark as to what actually happens, although they have a pretty well developed theory that an explosive's decomposition rate at high temperatures is the most important factor in determining explosive sensitivity.

The ideal situation for making such a test would be to place the explosive at a low temperature in an endless cylinder, then heat it to a specific high temperature until it explodes.

NOL's new experimental technique employs a tube made of the same thin stainless steel used in a hypodermic syringe.

The advantage of using this type of tubing is that it can be electrically heated to high temperatures almost instantly.



Since the ends of the tube are sealed, the explosive is prevented from escaping in vapor form before explosion takes place.

The point of all this is, of course, to learn more about the behavior of explosives so they can be designed to explode in a weapons system when desired, yet remain insensitive enough to withstand other than ideal conditions during shipment, storage and handling.

Letter of Appointment to Collateral Assignment Is Required in Certain Cases

If you're an officer who performs some collateral duty, such as Mess Treasurer or Classified Material Control Officer, you are not, under existing Navy-wide directives, required to have a formal letter of appointment. Whether or not you are appointed to your collateral duty by formal letter depends on the job and the policy of your command.

But, if your CO does not appoint you formally, it will do no harm to ask for a letter, and having one may save you from some confusing moments.

An example of the confusion that comes up from time to time was brought to the attention of ALL HANDS recently by the officers of a command who didn't have formal letters of appointment to their collateral duties. Each time they had an administrative inspection, they were asked to produce formal letters of appointment—noting that the standard wording in the inspector's check-off list was "Is the officer appointed in writing?"

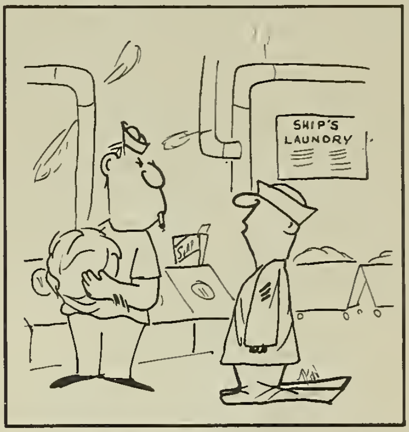
At the command concerned, a notice was published each month which set forth the boards, committees, or collateral duties to which the various officers were assigned. The notice charged each officer with the responsibility of performing the duty in accordance with existing directives.

As far as the officers were concerned, this procedure was sufficient for getting the word to whoever was responsible for what. Furthermore, they argued, the over-all Navy policy on individual letters of appointment is vague.

For example, the *Manual for Commissioned Officers Messes Ashore* notes that commanding officers shall appoint an officer as Mess Treasurer, but doesn't spell out how he should be appointed. By word of mouth? By a notice on a bulletin board? By formal letter?

Nevertheless, the check-off list used during inspection of the Mess called for a letter of appointment, which, as far as the Mess Officer was concerned, pretty well indicated his appointment should have been made in writing—by formal letter.

All-Navy Cartoon Contest
LTJG Thomas K. Dean, USNR



"I'd like to speak to someone in charge."

Other officers agreed that the notice published each month was sufficient "written" appointment to collateral duties.

You may or may not have a similar problem at your command. If you do, here's the word:

Although formal letters of appointment to collateral duties are not spelled out in Navy-wide directives, a letter is customary when the job is one in which accountable material is a responsibility. Otherwise, for any specific collateral duty, the basic directive which establishes the function should note whether or not a formal letter is required.

If the basic directive does not make the appointment procedure clear, you should follow the procedure contained in your type or administrative commander's instructions, customary administrative practices, or inspector check lists.

In other words, if your administrative inspector has "formal appointment" on his check-off list, this should be considered the official word that your appointment should have been made by formal letter.

Normal Tour of Recruiting Duty Set at Three Years

To make better use of experience, a new paragraph authorizing longer shore duty for BuPers-controlled male recruiters has been added to Chapter IV of the *Enlisted Transfer Manual* (NavPers 15909A) in the form of subparagraph 4.41g.

The new word affects personnel on recruiting duty whose shore tours expire during or after January 1963. It provides for a normal tour of recruiting duty of three years or the shore tour length established for the recruiter's particular rate or rating if that is longer.

Tours for BuPers-controlled male recruiters who are attached to overseas commands will conform to currently established tour lengths for the areas to which they are attached.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations. This report covers a two-month period.

Alnavs

No. 8—Reminded all officers of a change in submission dates for fitness reports.

No. 9—Rescinded immediately the restrictions on travel of DOD-sponsored dependents to Western Europe imposed by Alnav 38/61 and Marine Corps Order 1300.8D.

No. 10—Ordered changes in procedures for authentication of military officials during courts-martial.

No. 11—Invited attention to major changes in the nominating and screening process of selecting candidates for assignment to the Naval Preparatory School to compete for an appointment to the Naval Academy.

No. 12—Directed that a drastic reduction in the use of first class commercial air transportation become effective immediately.

No. 13—Announced approval by the Secretary of the Navy of the report of a selection board which recommended promotion of certain warrant officers and commissioned warrant officers.

No. 14—Referred to the duty free entry of personal and household effects after 1 July.

No. 15—Announced establishment by the Secretary of Defense of the

Armed Forces Expeditionary Medal. Medals will not be available for approximately six months.

No. 16—Discussed changes in entitlement to BAQ for enlisted personnel while in confinement under jurisdiction of foreign civil authorities.

Instructions

No. 1133.3E—Reemphasizes the need for the enlistment of qualified enlisted personnel and outlines an effective reenlistment program for use by commanding officers.

No. 1301.25B—Sets forth instructions regarding submission of the revised Officer Preference and Personal Information Card (NavPers 2774, Rev. 5-62).

No. 1430.12D—Provides instructions for the administration of the Proficiency Pay program.

No. 1611.12—Introduces the revised Report on the Fitness of Officers (NavPers 310, Rev. 4-62), and provides instructions governing its preparation and submission.

No. 1730.7—Reiterates and supplements the efforts to build a strong moral, ethical and spiritual foundation in the Navy.

No. 5390.2A—Consolidates into one directive general information pertaining to naval leadership.

Notices

No. 1440 (3 April)—Announced the disestablishment of the Oceanographer (SOO) service rating, and advance information concerning the Aviation Antisubmarine Warfare Technician (AX) general rating.

No. 1430 (4 April)—Announced the names of those who may be advanced in rating to chief petty officer, acting appointment.

All-Navy Cartoon Contest
Ronald E. Atchison, DM2, USN

"I'd say you have about 24 seconds . . . 23 . . . 22 . . . 21 . . . 20 . . ."

No. 1531 (25 April)—Provided authority to nominate enlisted USN and USNR personnel on active duty to participate in the Navy-wide examination for assignment to the Naval Preparatory School as candidates for appointment to the Naval Academy.

No. 1700 (30 April)—Announced information and rules governing the 1962 All-Navy photography contest and the 10th Interservice photography contest.

No. 1306 (8 May)—Provided advance promulgation of a change to the *Enlisted Transfer Manual* (NavPers 15909A) concerning the rotation tour dates of recruiting personnel.

No. 1000 (21 May)—Established procedures for reporting and verifying data on citizenship status of members of the naval service.

No. 1418 (25 May)—Announced the schedule for Navy-wide examinations for enlisted personnel to be held in July and August, and called attention to pertinent information regarding advancement in rating.

No. 1740 (7 June)—Cautioned naval personnel of the nondelivery by certain money-changing firms of money deposited for exchange to pesos for transmittal to the Philippines.

No. 1414 (21 June)—Provided information concerning plans for future changes to the *Manual of Qualifications for Advancement in Rating* (NavPers 18068).

No. 5802 (22 June)—Provided information concerning naturalization of aliens and the right to immediate naturalization of alien wives and alien adopted children of naval personnel assigned to duty abroad.

Role of Commanding Officer In Leadership Is Stressed

Leadership and high moral standards are being continually stressed throughout the Navy. Recently the Chief of Naval Personnel, in BuPers Inst. 1730.7, again emphasized that the protection of these standards is and must remain the responsibility of the commanding officer. He identified these particular responsibilities that rest with the CO:

- Encourage the men in development of moral, spiritual and religious values consistent with their religious beliefs.
- Take a personal interest in the off-duty activities of personnel and make sure a well-rounded program of religious, educational, and recreational activities is available to them.
- Insure that the type of entertainment presented and the contents of publications sold or circulated aboard the ship or station conform to established moral standards.

Commanding officers have been directed to develop to the highest degree the conditions and influences that will promote the health, morals, and spiritual values of their personnel. The character education session is one of the most useful methods, conducted both afloat and ashore throughout the Navy.

In BuPers Class A schools, the number of periods set aside for character education is dependent upon the length of the course. This ranges from seven periods for a course which runs 10 weeks or less to 14 periods for a course which runs 20 weeks or more.

Material for character education discussions is found in several publications. Each is slanted for a specific audience: for personnel afloat, *Because of You* (NavPers 15874); for personnel in the Far East, *My Life in the Far East* (NavPers 15881); for personnel in service schools, *Our Moral and Spiritual Growth—Here and Now* (NavPers 91962); for personnel in the continental United States, *This is my Life* (NavPers 15884); for male recruits, *For Men Only;* and for Wave recruits, *Getting to Know You.*

Full information may be found in BuPers Inst. 1730.7.

All-Navy Cartoon Contest
James J. McAndrews, Jr., DMSN, USN

DECORATIONS & CITATIONS

LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ Baylis, John R., CDR, usn, for the performance of outstanding services from October 1957 to June 1959 as Assistant Design Superintendent, Portsmouth Naval Shipyard. During this period, CDR Baylis made important contributions in the field of submarine design and development, particularly in the development of specifications. His contributions have resulted in significant improvements in submarine capabilities. His leadership, professional skill, and devotion to duty were in keeping with the highest traditions of the U.S. naval service.

★ Blair, Leon B., LCDR, usn, for services from 2 Feb 1957 to 8 Aug 1960 on the staff of Commander, U.S. Naval Activities, Port Lyautey, Kenitra, Morocco. LCDR Blair distinguished himself by his notable achievements in the field of international and community relations, attaining objectives which have materially enhanced the prestige of the United States. Among his many accomplishments, he gained outstanding recognition for the U.S. forces involved in the massive relief job which he organized and coordinated during the Rharb Valley floods of 1958 and 1960; rendered invaluable assistance following the Agadir earthquake disaster of 1960 by organizing, coordinating, and aiding rescue teams, and acting as liaison officer between the King of Morocco and the American Embassy.

Gold Star in lieu of Fourth Award

★ Espe, Carl F., RADM, usn, for service from May 1958 to April 1962 as Commandant, First Naval District; Commander, U. S. Naval Base, Boston, Mass.; and Commander, U. S. Naval Base, Portsmouth, N. H. RADM Espe effectively coordinated the efforts of the several naval commands in the First Naval District, materially strengthening and making more responsive their support to the Navy. A dynamic and forceful leader, he expertly welded the various elements of his command into a highly integrated, cohesive unit to assure a maximum return in effectiveness and readiness of assigned forces. He succeeded in solving a host of complex problems involving a combination of military and civilian policies, thereby enhancing the prestige of the Navy.

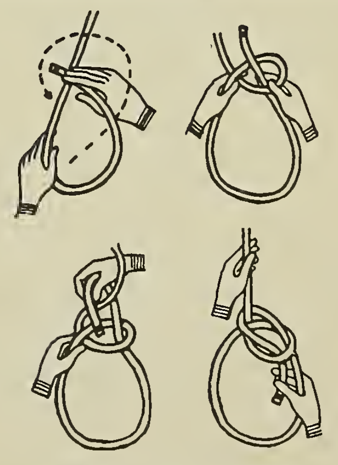
Gold Star in lieu of Fourth Award

★ McManes, Kenmore M., RADM, usn, for service as Commandant, Sixth Naval District, and Commander, U. S. Naval Base, Charleston, S. C., from September 1959 to May 1962. RADM McManes solved a number of varied and complex problems in a constantly expanding and increasingly important command. Through his forceful leadership, sound judgment, and skilled diplomacy, he ensured harmonious relations between staffs.

Gold Star in lieu of Second Award

★ Robbins, Thomas H., RADM, usn, for the performance of outstanding service from August 1960 to May 1962 as Commandant, Potomac River Naval Command. An inspiring, dedicated and resolute leader, RADM Robbins executed his responsibilities with marked professional skill and diplomacy throughout this period. Through his ability to work in both military and civilian spheres in a complex command at the seat of government, he rendered valuable service in promoting harmonious relations for the Navy. In meeting and solving the challenging problems created within his command, he displayed a high degree of technical competence, leadership, and sound judgment.

Grains of Salt —



STEPS IN TYING A BOWLINE

DISTINGUISHED FLYING CROSS

"For heroism or extraordinary achievement in aerial flight . . ."

★ Crafton, Robert W., LT, usn, for extraordinary achievement in aerial flight on 5 Feb 1962. As pilot of a Navy ASW helicopter, the HSS-2 *Sea King*, LT Crafton succeeded in establishing a world's speed record for helicopters—210.65 miles per hour over a 19-kilometer course. Through his exceptional achievement, he clearly demonstrated the inherent capabilities and the maximum performance of a most important aircraft of the U.S. Navy. In addition, he was instrumental in focusing world attention on the continued significant development of the science of aviation in the United States.

NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ Curran, Richard P., YN2, usn; Maxey, Ray W., RD1, usn; and Stroud, Galen P., RD2, usn; for heroic conduct on the night of 17 Jun 1961 while serving on board uss *Chowanoc* (ATF 100) in waters southwest of Sasebo, Kyushu Island, Japan. Volunteering to enter the wardroom of *Chowanoc* to attempt to subdue an apparently deranged member of the crew who, armed with two pistols, was holding three of the ship's officers prisoner, the three men braved a hail of bullets to seize and overwhelm the crazed man.

★ Sigurdsson, Daryl J., SN, usnr, for heroic conduct on the afternoon of 5 Dec 1961 while serving on board uss *Morton* (DD 948) at sea approximately 100 miles west northwest of San Diego, Calif. Hearing the cries of a shipmate trapped in a compartment filled with dense, toxic smoke during a shipboard fire, Sigurdsson unhesitatingly entered the compartment, groped his way through the blinding smoke, and succeeded in locating and in leading to safety the stricken shipmate. By his prompt, courageous, and decisive action in an emergency, Sigurdsson was directly responsible for saving a life.

BOOKS

FROM PRETTY PICTURES TO GRIM DEATH THIS MONTH

Two kindred books form a likable introduction to this month's selections. Either will help orient you to today's Navy and events.

Tall Frigates, by Frank Donovan, tells of the first vessels of the United States Navy, which defended the interests of the new nation on waters around the world. Men-of-war like *Constitution, Constellation* and *Essex* successfully challenged the great sea powers such as the French, the English and the North African corsairs in bloody or brilliant duels. Donovan tells not only of the ships, but of their crews, the life aboard them, and the manner in which they were handled, from their launching to the final battle at Hampton Roads when *Monitor* doomed them a hundred years ago.

Somewhat broader in scope, ***American Sail,*** by Alexander Laing, describes and pictures the story of the American sailing ships and men of the sea from colonial times to the last years of naval and merchant sail. Sea fights, piracy, clipper ships, whaling, shipwrecks and rescues, far voyages, regattas, disasters and triumphs—all are shown, in more than 500 illustrations, as they appeared to contemporaries.

The Serpent's Coil, by Farley Mowat, describes another aspect of the sea. He tells of the sequence of events that took place on the North Atlantic in the late summer of 1948 in which the men and ships concerned meet not once, but three times, what Mowat chooses to call the "serpent's coil." He tells the origin of the first hurricane and traces its course until its fatal meeting with *Leicester.* The final success of her struggle against the sea owed everything to the Newfoundland men who manned the tugs sent to salvage this derelict. A true story, but it reads like good fiction.

Wait long enough and everything will happen at sea. For seven years, Portugal's *Santa Maria* was queen of the passenger line on the Atlantic. Then, without warning, on her 71st voyage, she became the scene of revolution. In ***The Floating Revolution,*** Warren Rogers, Jr., tells what happened and why. The *Santa Maria,* as you may recall, was the ship chosen by a small band of Portuguese revolutionists as a means of denouncing their government. They weren't pirates, they insisted; they were revolutionaries. Rogers describes how the passengers took all this; the work of the U.S. Navy in tracking the ship down, shepherding her into Brazilian waters; the attempts at mutiny; the final outcome. This couldn't be put in fictional form because no one would believe it.

Two selections provide an interesting, if not ironic, comparison of a similar event. ***Through the Valley of the Kwai*** was written by a prisoner of war of the Japanese; ***The Yoshida Memoirs*** presents the efforts of an eminent Japanese statesman to reestablish his country after its defeat. As might be expected, the viewpoints are somewhat different.

Ernest Gordon in his *Valley of the Kwai* saw most of the war from the bottom up. He relates murder of prisoners by shooting or decapitation, by starvation, torture, and neglect of the sick and wounded. However, his is a story of hope—hope through the strength of personality of one person. Sick with dysentery, malaria and diphtheria, he was saved through the care and friendship of his fellows. His example gave hope to others. Despair gave way to hope; service to others lifted the spirits of the prisoners to a remarkable, and lifesaving, level. As a result of his experiences, Gordon entered the ministry after the war.

All-Navy Cartoon Contest
LT Paul B. Kincade, USN

"In the future, Scoggins, when I see fit to approve your leave request, a simple 'thank you' will suffice."

Shigeru Yoshida writes his *Memoirs* on an entirely different plane, of course, than that of Gordon. As foreign minister in Japan's first postwar cabinet and prime minister for several years, his memoirs are an account of the years of upheaval for his nation from the end of the war until the ratification of the San Francisco Peace Treaty in 1952. Yoshida gives an assessment of the achievements of the Occupation, a picture of relations between Japan and the United States and a hard-headed commentary on political affairs in postwar Japan.

Want to try something off-beat? If so, you might sample ***Russian Through Reading,*** by Kenneth Brooke and James Forsyth. You may find it entertaining and, if you're willing to expend a little effort, instructive. If you have any desire to learn Russian, this is for you. It assumes neither a knowledge of any other foreign language nor of formal grammar, and offers continuous Russian prose from the first lesson. Grammar is introduced as it occurs naturally in the text. You teach yourself by picking up the clues found in the text when the translation is given. An intelligent approach to the introduction of a new language. We could only wish the authors would do as much for English.

After reading the volumes suggested above, you are most certainly entitled to a bit of recreation. You can't go wrong with either of the fiction titles selected this month.

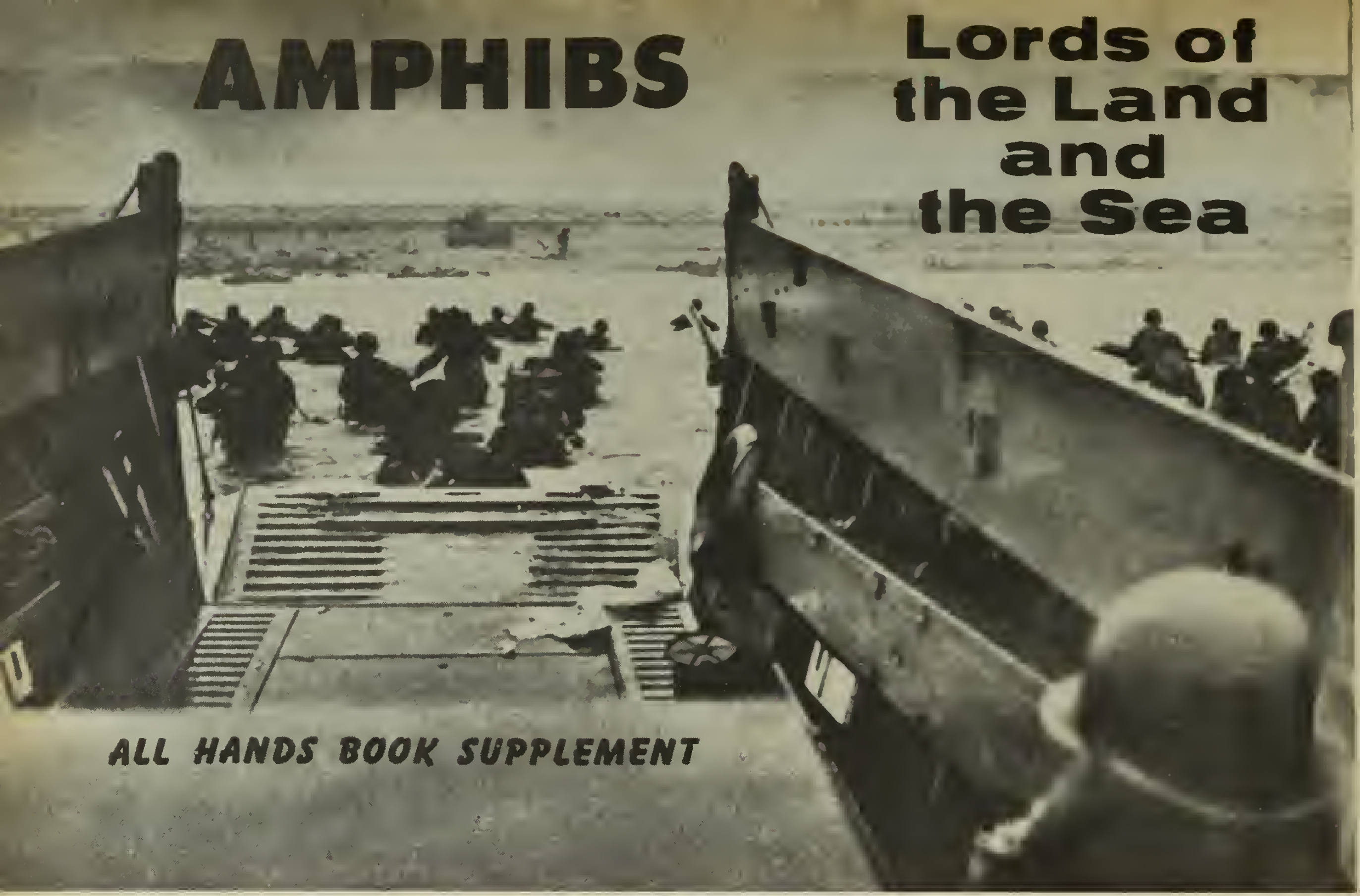
The Pass, by John Slimming, tells of the attempt of a handful of refugees who try to reach freedom from Red China through the mountains of northern Burma. An excellent adventure yarn, the story is told through the eyes of a photographer who, up to a point, is doing just a routine refugee story. But then, there's this girl. . . .

Youngblood Hawke, by Herman Wouk, needs no detailed description by readers of *The Caine Mutiny.* Anyway, it's about a tough and not entirely admirable character who hits the jackpot as a writer and has to fight off the penalties of success in New York, Hollywood and assorted locales. One crisis right after another.

These are only some of the books available at your ship or station library. They have been selected for review because we feel they are of wide interest.

AMPHIBS
Lords of the Land and the Sea

ALL HANDS BOOK SUPPLEMENT



Almost a lost art for many years, amphibious operations have since World War II increased in importance and flexibility. The Amphibious Forces, Atlantic and Pacific, have, within the 20 years since they were created, demonstrated that they are a mature, effective fighting force.

THE MAGNITUDE OF AMPHIBIOUS operations during World War II tends to create the impression that landing operations are a new type of military enterprise, particularly since, in modern times and until World War II, there have been few successful large-scale amphibious landings.

Nevertheless, the earliest account of amphibious warfare dates back nearly 3000 years. The Greeks, according to Homer's *Iliad*, were the first to use such techniques, attacking the city of Troy in Asia Minor near the Dardanelles. Crossing the Aegean Sea, they stormed the beaches near Troy and, after 10 years of struggle, destroyed the city.

The Persian king Darius launched a waterborne attack against the Greeks about 700 years later. It was in 490 B. C. that Darius constructed an especially designed amphibious fleet for an attack on Athens. His shipbuilders constructed a remote ancestor to the modern landing craft—a ship with a runway for horses. Darius was successful in his landing, but met defeat inland.

In 55 B. C., Julius Caesar landed two Roman legions north of the Thames River, which ultimately led to the defeat of the British. The success of his invasion resulted in the establishment of all southern England as a province of the Roman Empire. Since the Romans remained for four centuries, the results of this amphibious operation did much to influence the later course of English history.

It wasn't until the year 1066 when one of the most significant waterborne invasions of history took place. William the Conqueror crossed the English Channel to Britain with what was a sizable army for those days. At Hastings, he defeated the Saxon king Harold, and founded a new line of rulers.

Amphibious landings from 1066 to the American Revolution are too numerous to recite in detail, but it may be helpful to mention a few of the main operations.

An early invasion of Normandy occurred in July 1346 when the English invaded France. Almost 600 years later, history repeated itself.

The summer of 1588 saw the combined efforts of the English fleet and adverse weather conditions smash the Spanish Armada in its attempt to invade Great Britain.

In 1775, a party of U. S. Marines and Navymen conducted an amphibious landing at Nassau on New Providence Island in the Bahama Group.

FROM THAT DATE UNTIL 1941, U. S. Marines had participated in some 180 amphibious landings. Operations during this period included an assault on Vera Cruz in 1847 during our war with Mexico, and during the Civil War when some were spectacular successes and some were costly failures.

It was not until 1898, however, that the first large scale training in landing operations began. At that time,

---

Condensed and freely adapted from *The Amphibian*, Vol. 14, No. 3, and *The Gator*, 20 Feb 1962.

a battalion of Marines, consisting of five rifle companies and a battery of 3-inch artillery, was organized as a Fleet landing force. This organization underwent intensive training designed to improve rapid ship-to-shore movement and techniques in landing operations. The seizure of Guantanamo Bay was the first test of this specialized type of training.

The premiere of modern, large-scale landings came into being with World War I. The classic example of combined operations, conducted by the British during the Dardanelles campaign in 1915, represented an instance in modern times before World War II of an assault landing by a major force on a hostile and defended shore.

In the assault landings on the Gallipoli Peninsula (where the beaches were unopposed or lightly defended), troops landed with few or no losses; however, extremely heavy losses were suffered at strongly defended beachheads, although troops had successfully been placed ashore.

Nevertheless, in the following months, the land operations for the seizure of the Gallipoli Peninsula were unsuccessful. For a number of reasons, a secure beachhead was never established. While cooperation between troop and naval elements was excellent, the logistic buildup on the beaches was never adequate and communications remained primitive. The landing forces were finally evacuated in January 1916 after a disastrous campaign lasting eight months.

DURING THE 25 YEARS between Gallipoli and Guadalcanal, the United States developed the doctrine, organization, tactics and techniques necessary for success in this most difficult and complex type of warfare.

The period between 1936 and 1941 was one of application, test and experiment in the field of amphibious tactics. Organization, weapons and equipment were tested by the newly organized Fleet Marine Force and recommendations for further developments were placed under study.

It was not until 1941 that any serious training was undertaken toward the development of a technique for the landing of troops and equipment on open beaches. Amphibious warfare was so lightly regarded before that time that its training was assigned to the Atlantic Service Force as additional duty.

VERA CRUZ—12,000 men reached shore without loss.

AMPHIBIANS CHARGE the Rising Sun at Iwo Jima.

It was not until the attack on Pearl Harbor and our awakening to the fact that if we were to support our Allies with ground armies it must necessarily be done across open beaches that the inadequacy of our amphibious operations became evident.

Nevertheless, within a very short time (7 Aug 1942) the amphibious forces were in a position to land 11,000 Marines and their supplies on Guadalcanal in the face of the enemy.

AS AMPHIBIOUS LANDINGS generally followed a fixed pattern (with infinite variations dictated by local conditions), a brief description of this landing as set forth in Potter's *The United States and World Sea Power* might be useful in providing a picture of a typical operation:

> After a chaotic rehearsal of landing operations in the Fijis, the expeditionary fleet steamed westward into the Coral Sea—RADM R. K. Turner's Amphibious Force of transports carrying the 1st Marine Division, escorted by cruisers and destroyers; and a Support Force including the carriers USS *Saratoga* (CV 3), *Enterprise* (CV 6) and *Wasp* (CV 18) and their screening vessels. In the Coral Sea the fleet shaped course due north and headed for Guadalcanal.
>
> Under a clearing sky in the early hours of August 7, the Carrier Force moved into position south of Guadalcanal while the Amphibious Force slipped up the west coast, split into two groups around little Savo Island and entered Ironbottom Sound.
>
> In darkness shortly after 0600 fire support vessels of the south group began the bombardment of Guadalcanal, guns seeking out enemy shore batteries and dumps. Then came planes from the carriers to add to the destruction. With dawn just breaking over the scarcely ruffled sound, the convoy commander signaled "Land the landing force," and Higgins boats, ramp boats, and tank lighters began to hit the beach.
>
> Loading completed, the boats advanced to the line of departure, marked by two destroyers 5000 yards from the beach. On signal for the run-in, the destroyers gave the Guadalcanal coast a final bombardment with their 5-inch guns and then lifted fire just before the first landing craft grounded.
>
> By nightfall, the landing boats had put 11,000 Marines ashore and the beach was cluttered with great piles of supplies needed for support.

IN EARLY DAYS before landing craft and amphibious tractors, troops practice landing from small boats.

MEANWHILE, ON THE ATLANTIC COAST, a flotilla composed in the main of merchant ships, manned by volunteers, Coast Guardsmen and merchant mariners, was being formed. Thus the Atlantic Fleet Amphibious Force embarked upon its initial assault—the invasion of North Africa.

According to tradition, just before embarkation, the late General George Patton said, "Never in its history has the Navy landed an Army at the planned time and place. If you land us within 50 miles of our objective and within one week of D-Day, we'll go ahead and win."

General Patton had no complaints on this occasion. The Navy not only landed his 37,000 troops and 250 tanks on schedule but, in most cases, hit the beach at the predetermined area.

The entry of the United States into the conflict in the European theater was begun through "Operation Torch." The purpose of this invasion was to secure African bases from which we might carry the war to Sicily, freeing Great Britain's lifeline to India, and opening a way for the invasion of Italy and southern France. It was also undertaken to relieve the critical situation in the Middle East, since it diverted some German pressure from the English Army.

The invasion of Sicily in July 1943 found a huge armada of more than 3000 vessels and 160,000 men landing on the beaches—an operation destined eventually to force Italy out of the war. Similar ship-to-shore landings on the mainland of Italy at Salerno were made in September of that year.

D-DAY TASK FORCE—Part of a giant amphibious force moves across the English channel to France.

The invasion of Western Europe on 6 June 1944 took place over the beaches of Normandy. From 6 June to 27 July, 18 divisions or approximately 250,000 Allied troops were put ashore. In the first 28 days, some million men, 183,000 vehicles and 650,000 tons of supplies were deposited on the beachheads and in artificial harbors by a force of about 3000 craft and nearly 15,000 men.

The final major amphibious landing operation on the European continent was carried out in southern France in August 1944—an operation that aided in the ultimate defeat of Germany.

Amphibious operations in the Pacific did not halt with the invasion of Guadalcanal. In 1943, the completely reorganized PhibPac forces helped lead the U. S. along the long road back.

The Trobriand Islands were occupied and Rendova Island was invaded in a joint operation on 30 June. Rendova was crossed off the list 16 July.

The month of August witnessed the beginning of a series of strikes all through the Japanese-held areas of the Pacific. Backed by air forces and heavy surface craft support, the landing forces began to attack island after island in jumps ever closer to Japan.

Munda was overrun. Troops landed at Vella Lavella in the central Solomons. Kiska, in the Aleutians, was occupied by the Army.

Japanese outposts of Lae and Salamaua fell in September 1943, to combined Australian and U. S. troops. In November 1943, a three-way attack was made on the Gilbert Islands. Next was one of the bloodiest battles of the war—Tarawa—where more than 1000 lives were lost taking an island less than half the size of New York city.

Amphibians rang the curtain down on the year's end by putting Marines ashore at Arawe, and Cape Gloucester, New Britain.

In the first six months of 1944, Eniwetok in the Marshall islands was invaded and island after island was taken. Attention focused on the Marianas in June. Saipan was invaded. Guam was taken and Tinian fell.

The biggest landing in the Pacific up to that time took place 14 Oct 1944 at Leyte Gulf. The Philippines from Mindanao to Luzon were pounded from the air and carrier task forces hunted for the Japanese navy while the amphibious forces returned General MacArthur and his troops to the Philippines. On 8, 29 and 31 January a huge amphibious armada landed troops in the Luzon area. On 4 and 14 February, they landed at Mariveles, Luzon, and began to put pressure on Bataan. Corregidor was taken by a combined paratroop and amphibious operation 16 February.

On 18 February, the spotlight shifted to Iwo Jima which ultimately fell after long, bloody fighting.

As the Philippine campaign gained in intensity, a combined Army and Marine Corps invasion force prepared to attack the Japanese defenses on Okinawa. The Navy massed some 1400 ships for the attack. Okinawa became another stepping-stone to the Japanese mainland on 2 June.

Amphibious forces began to prepare for the final invasion—that of Japan—but surrender came before it could be put into effect. World War II was over.

THE READJUSTMENT FOLLOWING the war brought many changes. By careful and strategic dispersal of ships and assault waves, the amphibious forces minimized their vulnerability to nuclear attack. Assault procedures were revamped. They increased the speed of the ship-to-shore movement; improved air and naval gunfire support; streamlined logistic phases, and improved antisubmarine warfare defense.

The most far-reaching development was the concept of vertical envelopment. Designed to land assault troops ashore by air, and operating from ships at sea, vertical envelopment was created to eliminate difficult beach conditions, to occupy strategic positions, and to harass the enemy so that a landing could be made without undue interference by the enemy.

But vertical envelopment was not introduced to take the place of the water-borne ship-to-shore movement, which is the backbone of any amphibious movement. With it, an extensive amount of troops and their heavy equipment are placed ashore to provide an assault thrust of such military strength that an enemy will literally submit to defeat.

Various phases of the Cold War put these new concepts into practice. The United Nations action in Korea began 30June1950, with units of the Pacific Amphibious Force participating. Following the invasion of Inchon, the evacuation of Hungnam began in December of that year, conducted primarily by PhibPac forces. An estimated 105,000 combat troops, 101,000 South Koreans, 17,500 vehicles and 350,000 tons of supplies were removed safely. The last ship out was the high speed transport USS *Begor* (APD 127), which stood by to remove UDT personnel who remained behind to destroy buildings and piers.

In February 1951, another invasion of Inchon was conducted. In April 1953, two PhibPac LSTs USS *1090* and *1096* (later USS *Russell County*, now decommissioned, and USS *St. Clair County*) carried out a part of Operation Little Switch. This involved the transfer of sick and wounded North Korean and Chinese Communist prisoners from Koje-do and Cheju-do islands to Pusan, Korea.

The Passage to Freedom episode saw the exodus of 310,000 personnel, 70,000 tons of equipment and 8000 vehicles from North to South Vietnam when the Northern sector was about to be taken over by the Communists.

On 1 July 1955, all amphibious force tank landing ships were named for the first time. On that date, the names of counties and parishes of the United States were assigned to this type of ship.

On the Atlantic side, emergencies called for the assistance of the Amphibious Force in the evacuation of U. S. citizens and United Nations truce team members from the Gaza Strip in 1956. Two years later, in 1958, a crisis in Lebanon again emphasized the flexibility of the amphibs. On July of that year, amphibious ships in the Mediterranean were anchored in liberty ports, separated by as much as 1500 miles. Within three days, they had landed some 5000 Marines in Beirut.

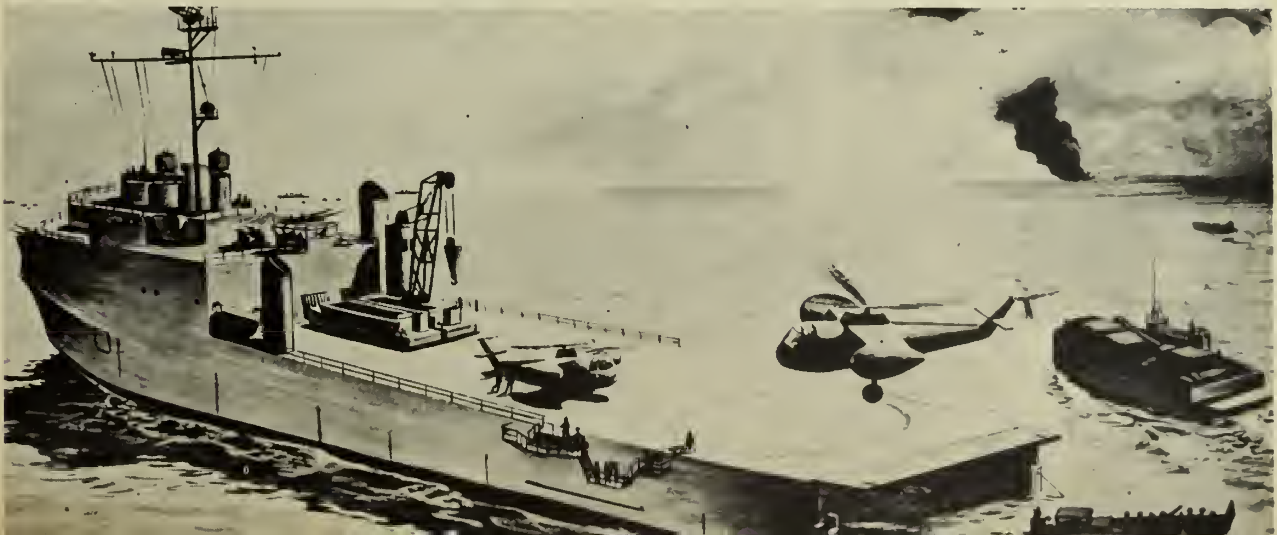
In 1960, the attack transport USS *Paul Revere* (APA 248) with the destroyers USS *Rowan* (DD 782) and *Gurke* (DD 783) recovered the nose cone of a missile designed to record nuclear emissions at various altitudes. Later that year, USS *Bexar* (APA 237) after embarking 1100 Indonesian troops and transporting them to the Congo, returned to San Diego via Panama, making the first round-the-world trip of a PhibPac ship for many years.

ANY MODERATELY ATTENTIVE reader will note that, as the years go by since World War II, the scale of operations of the amphibs has decreased. This is not to imply that the significance of these forces has shrunk correspondingly. On the contrary, on its 20th anniversary, the Amphibious Force remains an indispensable component of the Navy.

Dedicated to the belief that it can meet any challenge in the modern world, from small brush-fire wars to all-out nuclear war, the Amphibious Force remains in a state of constant readiness to move quickly to any area accessible by the world's oceans in carying out the policies of the United States.

If the Amphibious Force can compare its history of successful waterborne assault with the invasion of Troy in Asia Minor nearly 3000 years ago, then it can regard with satisfaction the words of an outstanding historian: "The amphibious character of the Greeks had already been determined. They were to be lords of land and sea."

NEW CONSTRUCTION—The Amphibious Transport, Dock (LPD) will carry transport copters, landing craft and troops with assault equipment. This ship will eventually replace the APA and the AKA.



TAFFRAIL TALK

COIN COLLECTORS, we've found, are often prone to get fairly fanatical about their hobby—so much so that they'll go to almost any lengths to increase and enhance their collections. And Navy coin collectors, apparently, are no exception to the rule.

As a case in point, consider Personnelman Second Class Ronald C. Thomas of USS *Kitty Hawk* (CVA 63). When it came time to ship over aboard that guided missile aircraft carrier recently, rare-coin fancier Thomas did so in a perfectly normal fashion—until it came to collecting his reenlistment bonus. Then he asked for $1000 of his loot in *dimes.*

Dimes, it develops, are not Thomas's only coin kick—just his latest one. In the years since he was first bitten by the collecting bug, he has built up complete Lincoln penny and Jefferson nickel collections. Now he plans to move onward to smaller things.

★ ★ ★

Not many sailors live in tents nowadays—but for 36 Navymen comprising six *Lorac* (Long Range Accuracy) communications monitoring teams along the East Coast from the Bahamas to Newfoundland, tent living is a way of life.

Each team consists of six technicians who operate from a portable 10-story signal tower, and generate their own power for the intricate electronic equipment they use. A team may spend anywhere from two weeks to four months at a site, depending upon its assigned mission.

These *Lorac* teams, we're told, are extremely efficient, and encounter no great difficulty in adapting to their nomadic existence. They also, apparently, become adept at living off the land.

At one northern campsite not so long ago, for example, a neighboring lobsterman was lamenting that his catch had dropped off dismally since his sonar went on the blink. In something less than a trice, the team's versatile technicians had the sonar rig back in working order again—and, says the crew's CPO-in-charge, "we haven't lacked for fresh lobster since."

★ ★ ★

Then, if you're still with us at this point, there is the little saga of Musician Third Class David J. Rydell of the attack aircraft carrier USS *Coral Sea* (CVA 43).

Back in October 1960, Rydell was serving in USS *Lexington* (CVA 16). One fine day, while steaming off the Pacific coast of Mexico en route to Pearl Harbor, he was seized with an unoriginal thought. Why not put a note in a bottle, throw it in the ocean, and see how it floats? He did just that—wrote his name, address, longitude and latitude on a piece of paper, sealed it inside an empty catchup bottle cadged from the galley, and heaved the lot off the fantail.

Months, then years passed. Musician Rydell forgot all about his impulsive act. Then one day earlier this year, he got a letter. It was from Ishikawa-Ken, Japan—and it began, "Dear Sirs: I picked out a letter in the bottle which you threw from overboard . . ."

Now he has a pen pal.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Information Bulletin, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau invites requests for additional copies as necessary to comply with the basic directives. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

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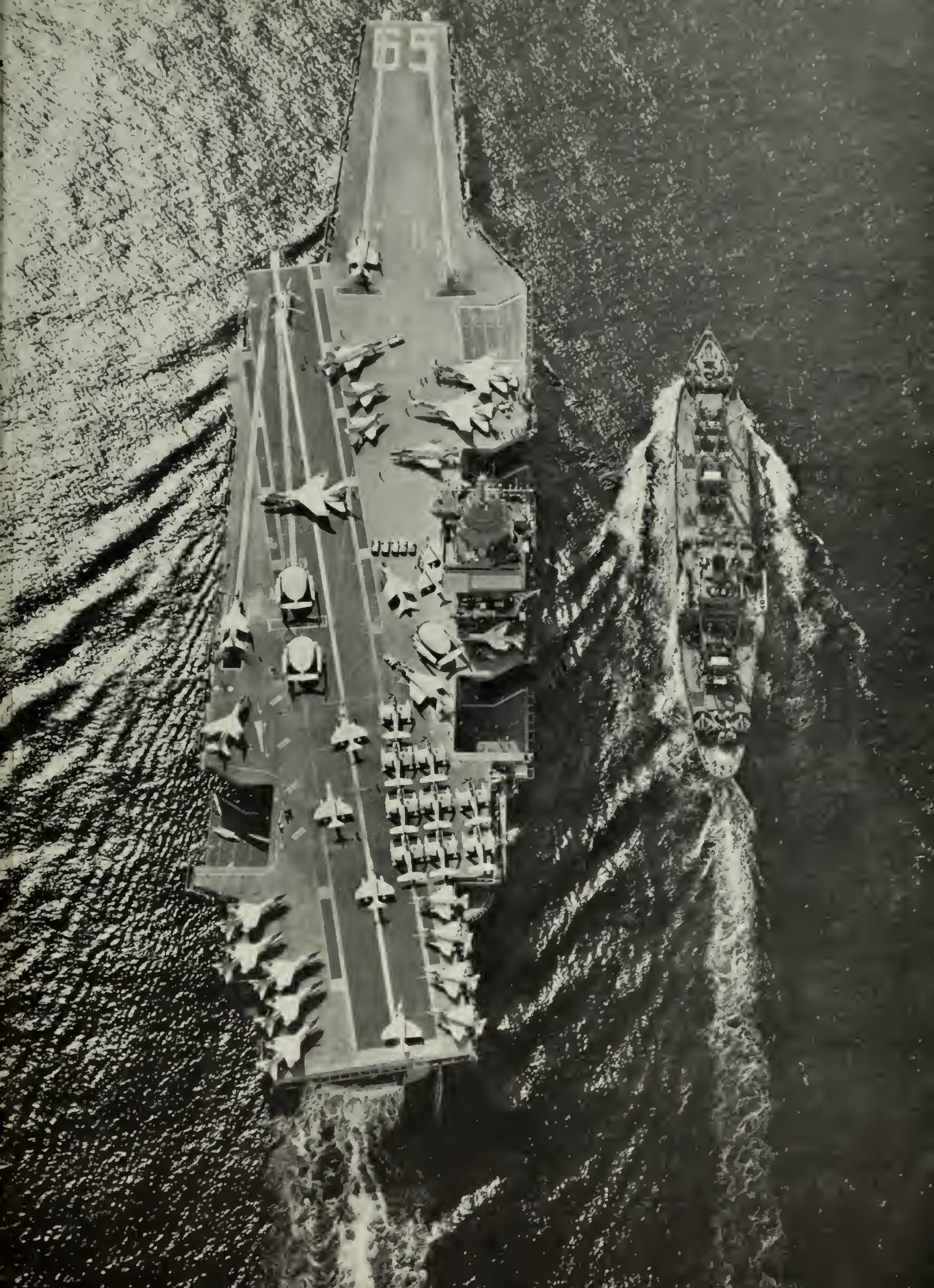
• AT RIGHT: AMMO PASSERS— The ammunition ship USS *Shasta* (AE 6) appears small while steaming alongside the nuclear-powered aircraft carrier USS *Enterprise* (CVAN 65) during a bomb loading exercise in the Atlantic.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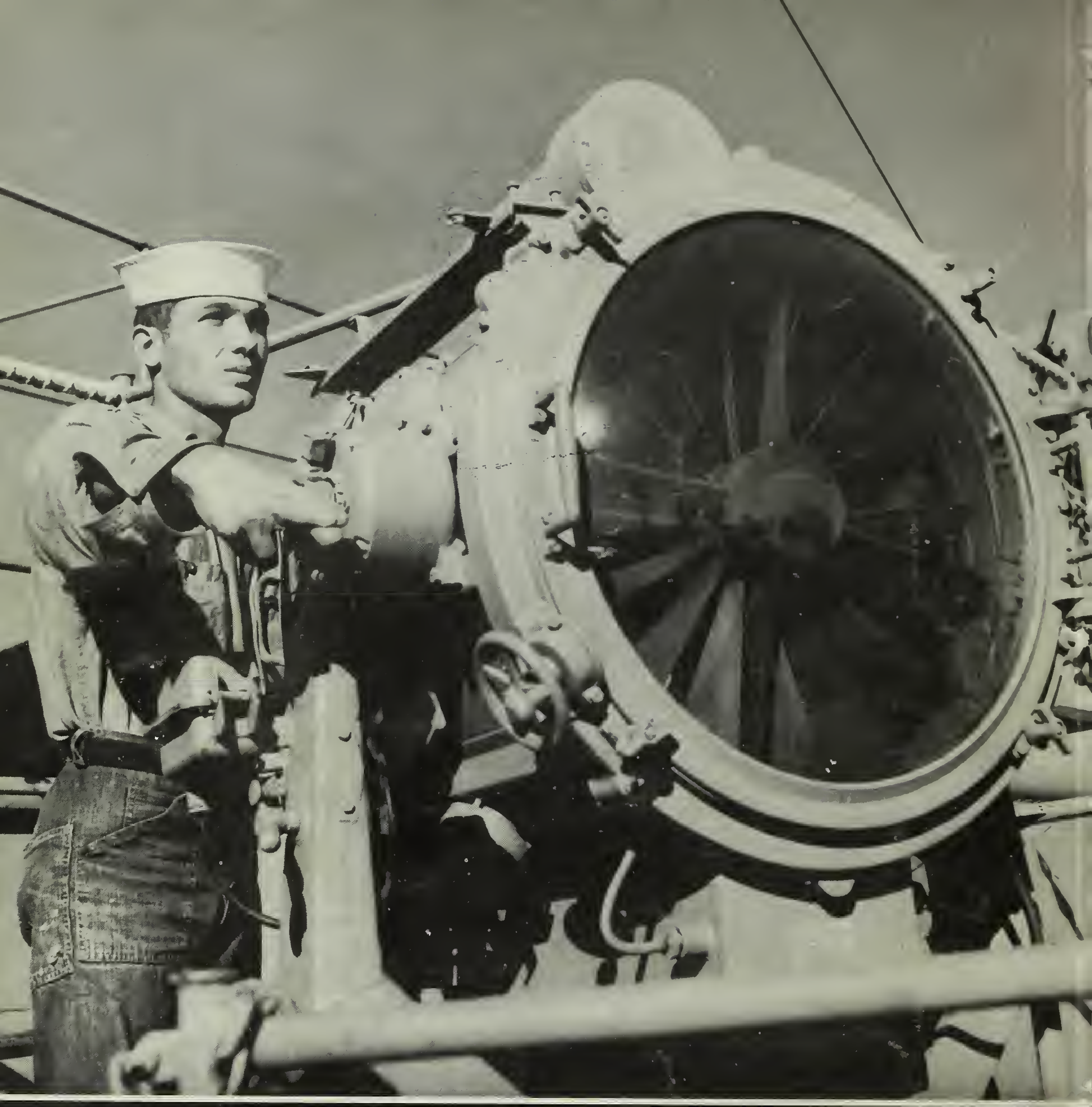

the message reads...

NAVY ON THE BEAM

D208.3:548

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

SCIENCES

Special Issue
DESTROYER NAVY

This magazine is intended for 10 readers. All should see it as soon as possible. PASS THIS COPY ALONG

SEPTEMBER 1962

THE 60TH ANNIVERSARY of the U. S. Destroyer Force is an occasion that is well known almost everywhere destroyermen visit—which is, indeed, almost everywhere.

On auto bumpers, windshields, bulletin boards, bulkheads, and about any place else a Navyman might tack up a poster or affix a sticker, the above picture has been prominently displayed for several months. Destroyermen and their ships are being saluted this year by everyone who is aware of the impact the Force has made in the building of today's Navy, and for the jobs the destroyers did in the past.

The family is big—there are more destroyers than any other type of ship in the Navy, all members of a clan which has grown in just six decades from a few torpedo boats.

THE MYRIAD OF JOBS performed by destroyers during wartime, and the multi-purpose grind of their peacetime operations, are the main reasons they enjoy a reputation as "workhorses of the Fleet"—in and out of the Destroyer Family.

The speedy, maneuverable, destroyer types are virtually made to order for a wide variety of missions. Among other things, they have served as convoy escorts, landing ships, minelayers, rescue ships, minesweepers, transports, picket ships, and recovery vessels. In addition, the DD-type is an effective antisubmarine weapon.

Not the least of the destroyer's talents is her ability to fight. She may carry missiles, rockets, helicopters and depth charges, in addition to 5-inch guns. Destroyers have been pitted against the biggest and best the enemy could offer when the chips were down—everything from machinegun nest to battleship.

This issue of ALL HANDS salutes the destroyer type ships, the men who have sailed in them, past and present, and the men and ships who operate in support of the family.

Herein we take a look at the histories of destroyers of yesteryear and watch them develop over a span of 60 years.

ALL HANDS
THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor
John A. Oudine, Managing Editor
Associate Editors
G. Vern Blasdell, News
Jerry Wolff, Research
Don Addor, Layout & Art
French Crawford Smith, Reserve

• AT LEFT: SALTY SAILING — A destroyerman mans his station on the bridge as the fleet, versatile greyhound sends the spray flying during exercises on the high seas.

• CREDIT: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

ON THE JOB — Friendly sight for Navy pilots is the DD standing by just in case. *Below:* DE fires a *Minnie Mouse* from *Weapon Alfa.*

World's

For a family which started growing only 60 years ago, the destroyers have done right well for themselves.

Through the years they have developed many unsuspected talents. This has been demonstrated through the myriad of jobs they performed during wartime. Further evidence is available in the grind of day-to-day peacetime operations.

They have proven themselves to be the most effective antisubmarine weapon ever developed.

They have ridden herd over convoys of merchant ships.

They've fought everything from machinegun nest to battleship.

They have served as minelayers and minesweepers.

They have been used as fast transport ships.

And landing ships loaded with Marines charged with establishing footholds ashore.

They have been sent singlehandedly on bombardment and small scale invasion missions. Until reinforcements arrived, they stood by as floating field artillery.

They kill subs.

They have scouted, protected, and run interference for task forces.

They have thrown smoke screens around friendly forces.

They have performed rescue missions.

They have plucked survivors from flaming ships that were so hot that the metal decks were buckling.

Most Versatile Ships

They make excellent space capsule recovery ships.

They kill subs.

Some destroyers carry drone helicopters.

Others carry mail and freight.

And missiles to shoot at enemy planes.

They serve as radar picket ships which patrol the Fleet early warning barriers.

They are good-will ambassadors.

They have poked their sharp little noses into about every port in the world, including Basra.

They do other things, too.

They kill subs.

Ask any destroyerman.

The speed, maneuverability, relatively high firepower, and comparatively low construction cost of the destroyer types have resulted in not merely the most versatile, but, ton for ton, the most efficient naval craft devised.

Destroyers also belong to a family of specialists.

EARLY DESTROYERS were developed to carry and fire a specific weapon—the torpedo. Through the years, the task on which perhaps most emphasis has been placed is that of seeking out and killing submarines. Much, if not most, of the Navy's antisubmarine assignments are handled by the destroyer family. And for good reasons:

- DDs have staying power—they can remain with a contact for days, or even for weeks, if it's necessary.
- DDs have all-weather capability—they can remain in the area of contact in any kind of weather.
- DDs can be equipped with all the weapons necessary to conduct a complete attack on a sub.

Emphasis on ASW has been evident in the development of destroyer type ships. Improvements in radar, sonar, electronic countermeasures and communications systems are continuous. The destroyer family is being equipped with ASW weapons like DASH (drone antisubmarine helicopter) and the system's accompanying hangar, launching and landing platform, and control equipment. (DASH is designed to add a long range punch to the DD's sub killing arsenal. Briefly, here's how it works: Once an enemy sub is detected, the drone helicopter is launched and guided toward the target by radar. Over the target, either homing torpedoes or nuclear depth charges can be dropped to accomplish the kill.)

The destroyer as a multi-purpose ship is largely the result of changes brought about between World Wars I and II. The tactical uses for destroyers were expanded. DDs began to take on not only the looks, but also some of the duties of light cruisers; during World War II they were assigned to scouting, screen and combat duties that had before been cruiser tasks, and were sent on bombardment and invasion missions.

It was during World War II that the destroyer came of age as an all-purpose ship.

Because of its mobility, and shallow draft, the DD is able to steam close to shore to slug it out with field artillery. The Germans have been credited with first employing destroyers as floating field artillery. During the British invasion of Norway early in 1940 a few German DDs came out of hiding in the depth of a fjord and wiped out a beachhead.

The same year the British Alexandrian squadron was called upon to soften up beachheads in support of the Libyan campaign. British DDs were stationed so close to shore they could fire almost point-blank at field artillery positions, machinegun nests, tanks, and even ground troops.

In October 1942, it was floating firepower in the form of a few DD and DE squadrons which opened the first breach in the German lines during the North African campaign.

THE INVASION of Southern France exemplified the new importance of U.S. destroyers—nearly 50 of them were concentrated in less than 20 miles of shoreline during a major assault. They bombarded defense installations while, further offshore, cruisers and battleships tossed heavier artillery in preparation for the landing.

The close-in use of DD firepower, however, did not excuse the destroy-

DOUBLE ACTION—Destroyer exchanges fire with shore batteries while laying smoke screen in Wonsan harbor.

ers from performing their more orthodox jobs. There was lots to do: Minesweeping, convoying, and daily scrapping with enemy subs. And, there was always something new to test her versatility, such as pinch-hitting for the landing ships that were yet to come.

The four-stacker destroyers *Bernadou* (DD 153), *Cole* (DD 155), and *Dallas* (DD 199)—all launched shortly after World War I and resurrected in 1939 for antisubmarine patrols in the Atlantic—served as landing ships in the North African invasion of November 1942. *Dallas* landed her troops at Port Lyautey, Morocco. *Bernadou* and *Cole* entered the port of Safi, Morocco. The destroyers' assault troops established and held beachheads until slower transports could move in, lower invasion barges, and land the troops that were to spearhead a more far-reaching assault.

The wartime roles of the DD were greatly expanded in the vast reaches of the Pacific.

Teamwork between carriers and destroyers reached a high state of efficiency; when distance called for the extensive employment of aircraft, it was the DD's job to lend her high maneuverability and firepower to the defense of the more vulnerable carrier. In addition, island-hopping, convoy protection, scouting, and assault assignments made strenuous demands on her ability to do many jobs.

Minesweeping operations became the specialty of many destroyer types. Ships such as USS *Hamilton* (fitted for minesweeping capability and redesignated DMS) swept channels clear for invasions of the Admiralty Islands, Kwajalein, and Hollandia, and cleared paths for men who waded ashore at Saipan, Guam, and the Palaus. *Hamilton* was in the van of invasion forces at Leyte and Luzon. *Hamilton*, incidentally, was later converted to AG 111.

Pacific Fleet destroyers fought through the slot of the Solomons into the face of the Tokyo Express.

Some ran headlong at enemy battleships and died to protect the ships they were charged with escorting.

Many fell victim to enemy artillery and suicide bombers.

BEFORE AND AFTER the attack on Pearl Harbor, underseas warfare was a dominant theme, both in and out of the destroyer force. Just as the old four-stackers had protected convoys against sub attacks during WW I, newer destroyers and destroyer types were built to handle much of the task of getting slow convoys to their WW II destinations.

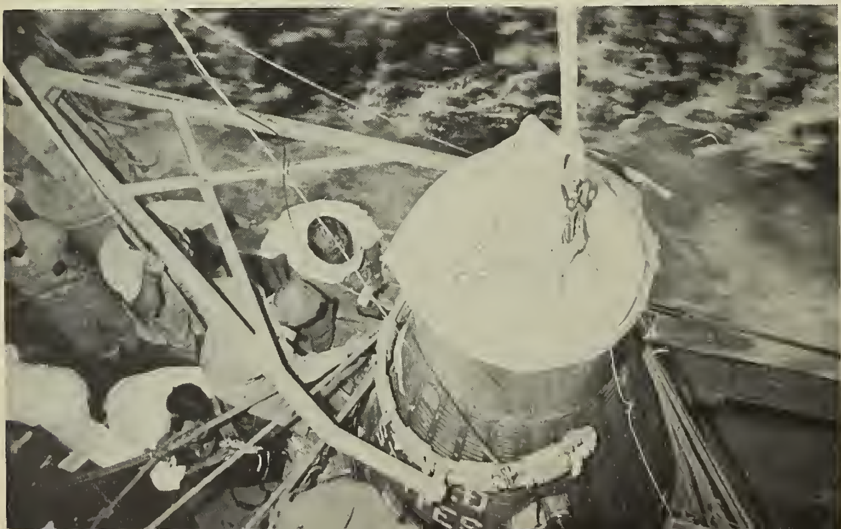
The "escort vessel," or DE, smaller than a regular destroyer, was mass-produced by wartime shipyards to serve as convoy escorts. More than 400 wartime DEs were placed into commission; the full-sized DDs were relieved for other duties. (The DE is now called "escort ship.")

THE HISTORY of naval warfare contains few actions which match the battles fought by a few DEs and DDs during the slugfest off Samar in October 1944. Three destroyers and four DEs, along with six escort carriers, were pitted against four enemy battleships—including the monstrous 63,000-ton *Yamato*, which had 18-inch guns—and eight cruisers and 11 destroyers. Though outweighed and outgunned, the force fought gallantly. The destroyers *Johnston* (DD 557) and *Hoel* (DD 533) and the escort ship *Samuel B. Roberts* (DE 413) were sunk during their fight against overwhelming odds.

The DEs gave a good account of themselves wherever they served. The little ships proved their worth not only in convoy-escort type work, but in many other fields. As members of hunter-killer groups, they helped launch the major offensive against enemy subs in the Atlantic. They served as plane guards for carriers, helped soften up enemy-held beaches for invasion, and, with troop quarters and the addition of gear for stowing and handling small landing craft, they became high speed transports (APD).

By the time the smoke of World War II had cleared, the destroyer types were well established as all-around ships. After the war many members of the destroyer family were sold by the Navy; many others went into the mothball fleet.

NICE CATCH — Destroyermen and astronaut John Glenn inspect space capsule on board USS Noa (DD 841) after its recovery from Atlantic waters.



In 1950 the Navy started a program of converting DEs to the floating radar sets called DERs (radar picket escort ships).

DESTROYERS WERE NOT IDLE during the Korean conflict—not by a long shot. A typical Korea destroyer group was DesDiv 151.

In the Korean area from August 1952 through January 1953 the four ships of DesDiv 151 averaged 36,000 miles underway; a good part of which was under combat conditions. Once, the ships operated continuously at sea for 34 days; on another occasion for 32 days. In a five-month period the ships averaged 26 underway refuelings and eight replenishments and rearmings.

The DesDiv also destroyed 20 floating mines, and, among other things:

- USS *Boyd* (DD 544) blasted enemy supply trains on Korea's west coast.
- USS *Tingey* (DD 539), in interdiction work along the east coast from the 38th parallel to the Korean-Siberian border, sent shoreward more than 3000 rounds of 5-inch ammo.
- USS *McDermut* (DD 677), after damaging an enemy supply train, came to the rescue of minesweepers that were being worked over by large caliber shore batteries. *McDermut* silenced the enemy guns with a barrage of 5-inch fire and laid a smoke screen to cover the sweeps' retreat.
- USS *Yarnall* (DD 541), after a month with a British-commanded task group on the west coast of Korea, rejoined the DesDiv, and by the end of the tour had chalked up four counter-battery engagements with the enemy.

Other Korea DDs knocked out trains, bombarded shore batteries, shot up bunkers, laid smoke screens and destroyed mines. They served as ASW screen ships, helped keep the enemy's small craft shorebound, carried passengers, light freight and mail for highline transfer, stood ready with antiaircraft batteries in the event of enemy air strikes, and acted as homing ships to help guide aircraft back to their carriers.

RESCUE WORK is another job that the destroyer does well. Large and small scale rescues performed by destroyermen add lustre to the Navy's history records.

TEAM WORK—P2V *Neptune* passes over USS *Hammerberg* (DE 1015) while hunting for enemy subs during exercises off the coast of Argentina.

Examples of classic large scale rescue missions are contained in the histories of the old four-stackers *Bainbridge* and *Smith*.

Back in 1922, *Bainbridge* (DD 246) rescued 482 of the crew and passengers of the French military transport *Vinh-Long*.

On 16 Dec 1922, *Vinh-Long* was making passage from Bizerte to Constantinople (now Istanbul). She was carrying families of French officers and a large amount of ammunition intended for delivery to French battleships. A fire broke out in her stern and spread throughout the ship.

Bainbridge, not far away, spotted the burning transport. Lieutenant Commander W. A. Edwards, the DD's commanding officer, ordered his ship alongside.

Twice the DD was blown back by the force of explosions. The destroyermen, however, clung to their task of rescuing the panic-stricken passengers.

After *Bainbridge* had been blown a ship's length from the tanker, there was one last desperate solution to the problem of remaining alongside. LCDR Edwards ordered full speed ahead, rammed the transport, and wedged the DD's knifelike bow into its side.

Then, securely locked in the gaping hole which their ship had made, the destroyermen went to work. The DD's small boats scoured the surrounding water picking up scores of men, women and children, while the remaining passengers and crew were led to safety.

Of a total of 495 on board the doomed ship, 482 were rescued by *Bainbridge*.

LCDR Edwards was presented the Medal of Honor for heroism by President Coolidge at the White House on 2 Feb 1924.

THE DESTROYER *Smith* (DD 17) had a complement of fewer than 100 men. For a couple of hours one night in July 1918 she bulged at the seams with more than 700 extra passengers.

On 1 Jul 1918 *Smith* was escorting the transport *Covington*. Shortly after 2100 the transport was struck by a torpedo. *Smith's* log contains the rest of the story:

"At 2107 saw heavy cloud of black smoke above *Covington's* smoke stacks. Changed course to right and heaved over towards *Covington*. Went to general quarters and went ahead to emergency full speed. *DeKalb* [another ship in convoy] headed off about 30 degrees to the left, remainder of convoy about 30 degrees to the right. Proceeded to point 1000 yards on port quarter of *Covington* and laid a barrage of 22 depth charges, all charges functioning. Was followed by *Porter* (DD 59) and *Little* (DD 79), who are believed to have also dropped depth charges. Proceeded to *Covington*. *Covington* fired several shots from port after gun. Circled her twice.

"Stopped abreast and called boats in water alongside. Began picking up survivors in boats. Kept a crew in each boat so as, if necessary, to send them back to the ship, as CO of *Covington* had signaled that ship probably would not sink. Sent six boats to pick up men on rafts, and three boats to ship. At 2250 cut loose all boats alongside and proceeded

MINELAYER TOO — USS *Tolman* (DM 28), shown during WW II, was one of group of destroyers converted for mine work. DMs are now in Reserve Fleet.

close to *Covington* with intention of going alongside, having misinterpreted a signal which was thought to convey the meaning that many men were still on board.

"Hailed *Covington*—no answer. Three boats appeared under *Covington's* stern, which signaled no survivors left on ship. Picked up survivors still in boats."

Smith did the rescue job so thoroughly that in little more than three hours 743 men had been hauled on board. The crippled transport was taken in tow by tugs.

Smith, almost awash from the added weight, arrived alongside a troop carrier 15 hours later and offloaded the passengers.

THERE'S SEEMINGLY NO END to the rescue missions in which destroyers have played major roles.

Many a flier shot down or forced down in trouble has made it back to his squadron simply because a destroyer would not give up the search. (Destroyer cooperation with airdales goes back a long way. Early experiments in naval aviation frequently found DDs on the spot as watchdogs. For example, the May 1919 flight during which the Navy's NC-4 spanned the Atlantic for the first time, was watched closely by destroyermen stationed at 50-mile intervals from Newfoundland to the Azores.)

The Atlantic Fleet's USS *Manley* (DD 940) recently demonstrated the destroyer's proficiency in rescuing downed fliers during operations with USS *Independence* (CVA 62) off the Virginia Capes. In two days *Manley* picked up two pilots whose planes had crashed in the Atlantic. Both rescues were conducted in pitch dark.

TODAY'S DESTROYERS and destroyer type ships can, if necessary, perform the many functions that made them famous during wartime.

As in the past, they are active in air defense missions. With their qualities of endurance, stability, and seaworthiness, they make excellent picket ships for patrol duties along the Atlantic and Pacific Fleet early warning barriers.

Members of the destroyer family which operate along the surface barrier extending from the Grand Banks to the Azores have plowed through the North Atlantic at its worst. A typical picket ship may steam 6000 miles on one patrol.

TO THE RESCUE — Speedy DDs have a long record of rescue work. Here, USS *Robison* (DDG 12) picks up survivors from a sunken fishing craft.

In the Pacific, picket patrols originate at Pearl Harbor, Hawaii.

In both Fleets, the radar picket ship is a link in the chain which protects the U. S. against surprise air attack.

The DER—radar picket escort ship—is made to order for such strenuous duties. A typical DER has four diesel engines for power, and—although her top speed is less than her bigger, sleeker, destroyer family sisters—for the job she is designed to do, her speed is more than adequate and she can drive thousands of miles without refueling.

DERs patrol the early warning barriers at all times. Additional support is provided by airborne early warning aircraft which maintain constant surveillance up and down the warning line. This sea-air radar coverage reduces the possibility of a surprise enemy end-run around our land-based search network.

Picket patrol on one of the barriers is sort of like a game of musical chairs. On signal, all ships down the barrier line proceed on their patrol course. A replacement ship takes a place at the end of the line when it's time for the lead picket ship to drop out and head for home—picket and mission completed.

EXPERIMENTS WITH today's destroyers occasionally reveal new strategic uses. For example, a reorganization of the Atlantic and Pacific Fleet Cruiser-Destroyer Force represents changes necessitated by new developments, modern weapons, and new ideas about destroyer operations.

The plan is called the Flotilla Concept. In the Pacific it combines one cruiser with two destroyer squadrons into one unit called a cruiser-destroyer flotilla, which is commanded by a rear admiral.

One of the destroyer squadrons is equipped for antisubmarine warfare. The other is armed with surface-to-air missiles and concentrates on aircraft interception. All ships of the CruDesFlot function as a unit whether deployed to WestPac or resting in a yard. CruDesFlots 3, 7, 9 and 11 are now active in the Pacific. Others are following.

In the Atlantic, the basic organization involves six flotillas, each of which contains approximately three squadrons of destroyer type ships. Four of the flotillas will include cruisers, the remaining two only destroyer and escort squadrons.

It seems there's no end to new jobs for destroyers.

Keeping pace with the times, destroyers have an important role in U. S. space advances. The speedy, maneuverable DDs are virtually made to order for the recovery of space capsules at sea. The pickups made by USS *Rowan* (DD 782) and *Noa* (DD 841) are examples of what DDs have done in the recent past.

Rowan broke into the news as a member of the U. S. space team in the fall of 1960 when an instrument-filled package was rocketed into space from Point Arguello, Calif., to a point some 1320 miles out into the Pacific.

A three-ship task group, of which *Rowan* was a member, was charged with recovering the capsule. The other two ships were USS *Paul Revere* (APA 248) and USS *Gurke* (DD 783). The estimated impact area was a section of water approximately 1500 miles south-southwest of San Diego, about midway between Acapulco, Mexico, and Hawaii.

After rehearsals with a dummy capsule, *Rowan* and her companions deployed to their recovery positions: *Gurke*, six miles north of Point Zulu (the estimated impact area); *Rowan*, 62 miles east; and *Paul Revere*, 30 miles west-southwest.

Half an hour after the capsule was blasted into space, reports of radar contacts began pouring into *Paul Revere's* control room. *Rowan* was the closest—approximately 60 miles away. *Rowan* plotters pinpointed the capsule's position. Once alongside the capsule, a couple of destroyermen leaped into the water and secured it with line. The destroyer then messaged the news that the mission had been successful.

The capsule *Noa* plucked out of the Atlantic one day last February contained Lieutenant Colonel John Glenn, USMC, who had completed a three-orbit flight around the earth. Like other DDs in the special task force which comprised the capsule recovery team, *Noa* was well prepared for the pickup. One of her whaleboat davits had been specially rigged with a super-strength braided nylon line and a special winch.

AMPHIB DUTY TOO — Addition of troop quarters and landing craft gear turned DDs into high speed transports like *USS Carpellotti* (APD 136).

When the capsule reentered the atmosphere after five hours and 53 minutes in space, a *Noa* crewman spotted the huge orange parachute which eased it back to earth. *Noa* was about three miles away. Nearing the capsule, the ship jockeyed into an approach from the windward side. This enabled her to nudge gently alongside the bobbing space craft without damaging it. A special *Noa* sea detail swung into action, and, before long, both capsule and astronaut were safely on board.

Advances in ship design in recent years make it pretty clear the destroyer family is keeping pace with the rest of the Navy. USS *Dewey* (DLG 14), for example, the first-commissioned of the 10-ship *Farragut* class guided missile frigates, is one of the first ships designed and built from the keel up with emphasis on guided missiles.

Dewey's twin launcher fires the *Terrier*, which can destroy aircraft traveling at supersonic speeds at altitudes above those reached by conventional gun systems. The missiles are selected from below-deck magazines and placed upon the launcher which is trained, elevated and fired automatically. The operations are directed from *Dewey's* CIC.

Backing up *Dewey's* missiles are five automatic rapid-fire guns: A 5-inch/54 and two twin 3-inch/50s. The latter have the advantage of each being on a separate fire control system, which allows for increased versatility in tracking and firing.

Dewey types also have radar gear which can detect targets more than 200 miles distant.

Dewey's main antisubmarine weapon is *Asroc*, the rocket-propelled homing torpedo. An 8-round *Asroc* launcher is mounted on *Dewey's* O1 deck level forward of the bridge. (The launcher's nickname is "the coffin," which it somewhat resembles.) Also included in *Dewey's* antisubmarine warfare gear are two triple torpedo tube mounts from which homing torpedoes are launched.

Dewey can stop, start, turn or change speeds with completely automated boiler operation. Her high bow contributes to her stability; the effect of bow waves at high speeds is lessened. The over-all difference? "Quite noticeable," report men who've served in older DD types.

In spite of the trend toward job specialization in the destroyer categories, many DD-types remain jacks-of-all-trades. Today's picket ships, escorts, frigates and guided missile destroyers are operational proof of specialization of sorts, but these ships, along with the many run-of-the-mill DDs still in service, can, if necessary, screen a Fleet, shoot it out with enemy planes, shore batteries or ships, and serve as weather stations, frontier guards or transports.

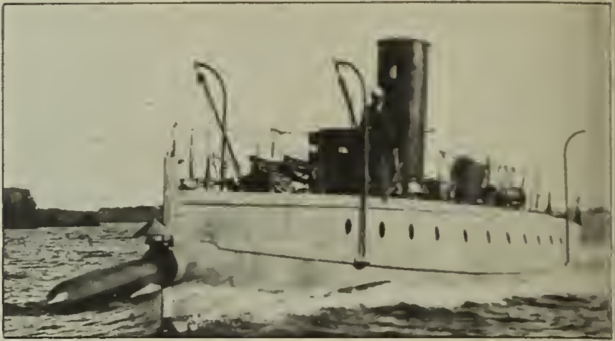
Members of the destroyer family are tougher than ever.

They'll tangle with anything from life raft to carrier at the drop of a hat (or push of a button).

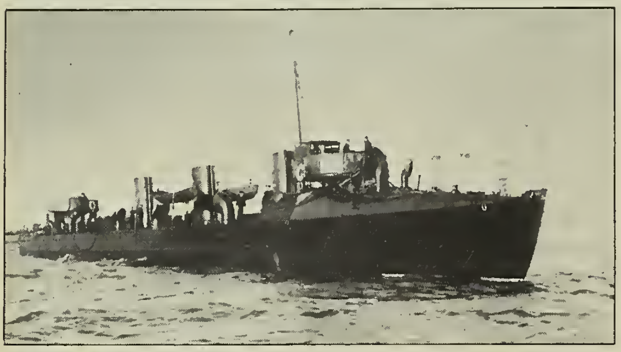
—Dan Kasperick, JO1, USN.

The History of

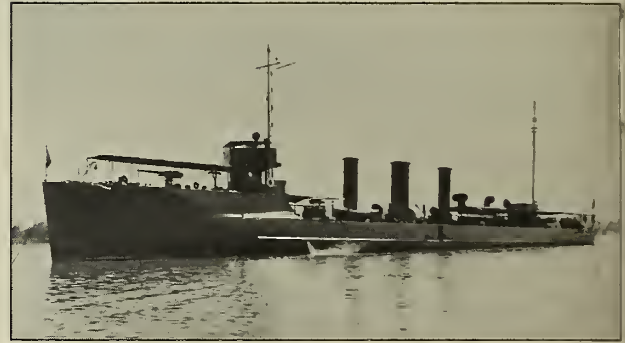
UNITED STATES SLOOP OF WAR RANGER One of the Revolutionary War ships known as 'Eighteenth Century Destroyers,' the 18-gun sloop under Captain John Paul Jones was the first warship to fly the Stars and Stripes.



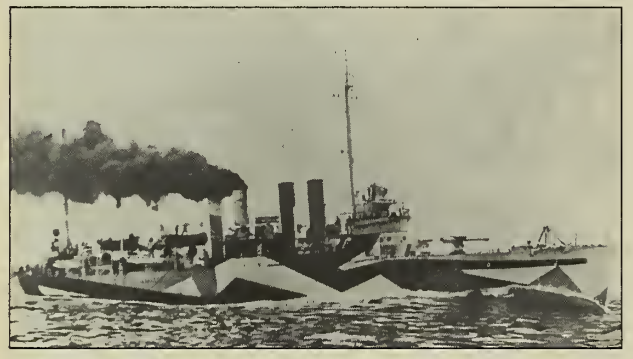
USS STILETTO (WTB 1) This 94-foot wooden torpedo boat was built in 1886 for experimental and training purposes. Single-screwed, her four-ton coal supply could drive her at 18.2 knots. Here she fires a torpedo from her bow tube



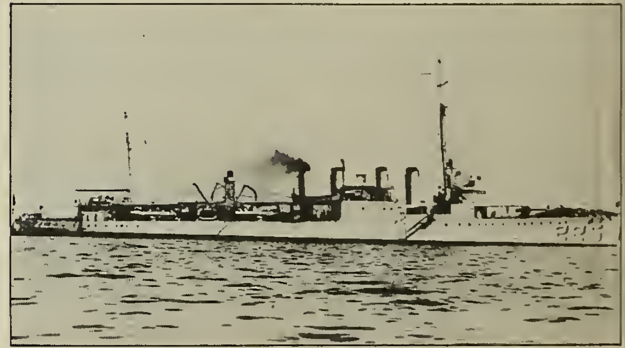
USS STRINGHAM (TB 19) Requested by President Teddy Roosevelt and commissioned in 1905, this 228-foot torpedo boat cut water at 30 knots. She carried four 6-pounders and two 18-inch tubes. The U.S. built 35 torpedo boats.



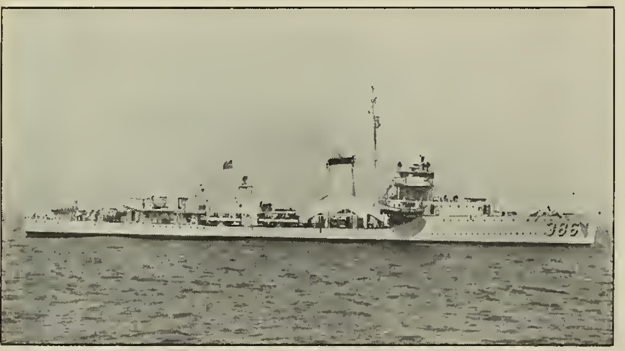
USS TERRY (DD 25) (PAULDING CLASS) Commissioned in 1910, she had a 742-ton normal displacement and bore 14-pounders, .30 cal. guns and 18-inch tubes. Three screws drove this 294-foot turbine-driven oil burner at 29.5 knots.



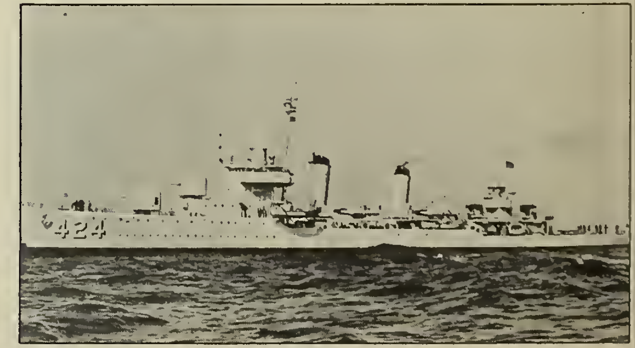
USS COLHOUN (DD 85) (WICKES CLASS) Commissioned in June 1918, this 'light boat' four-stacker, seen here in her war paint, measured 314½ feet. Later converted to APD2, she was lost to Japanese aircraft on 30 Aug 1942.



USS POPE (DD 225) (CHANDLER CLASS) Commissioned in 1920, she was one of four four-stackers which sank 23,496 tons of Japanese shipping at Balikpapan in January of '42. On 1 Mar 1942 she was sunk in the Java Sea.



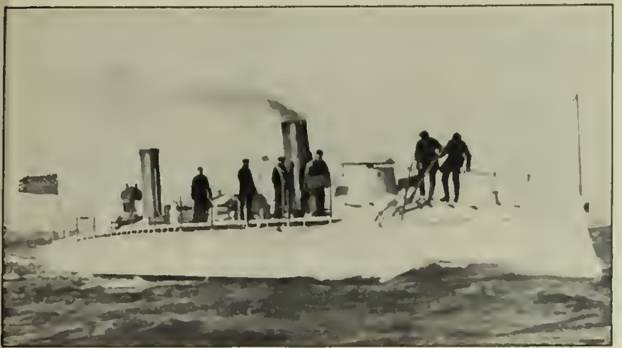
USS BAGLEY (DD 386) (CRAVEN CLASS) Commissioned June '37, the 341-foot DD defended at Pearl Harbor, fought at Rabaul, Savo, battle of the Eastern Solomons, New Britain, the Marianas operation and Cape Engano mop-up.



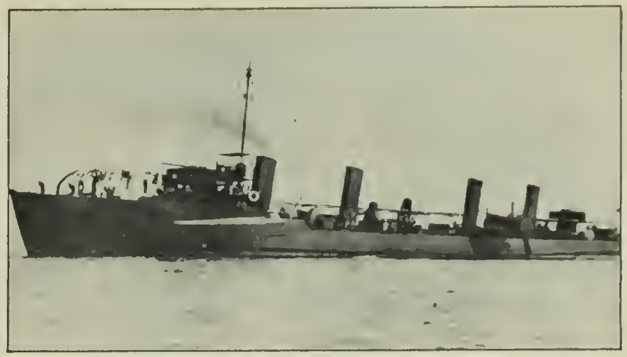
USS NIBLACK (DD 424) (BENSON CLASS) This 347-foot, 5-inch DD, commissioned in 1940, fought German U-Boats from Iceland to the Med. She carried five 5-inch 38s, four .50 cal., one Y gun for depth charges and two torpedo nests.

Prepared by All Hands Magazine

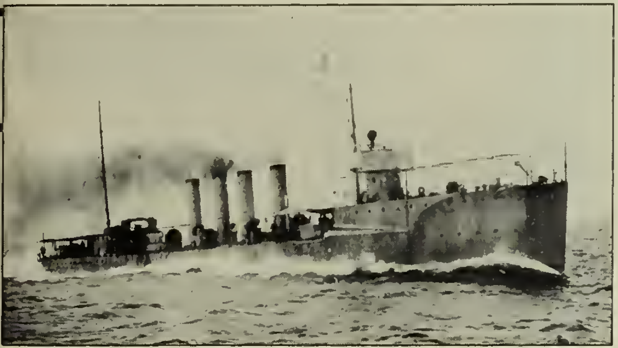
the Greyhound



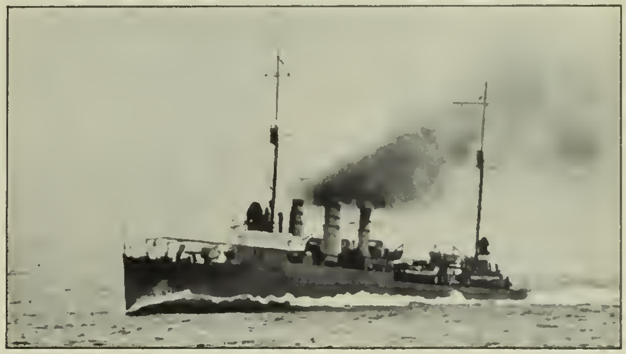
USS CUSHING (TB 1) Requested by President Cleveland, she was commissioned the first steel torpedo boat 22 Apr 1890. Two screws pushed the 140-foot coal-burner at 23 knots. She boasted three torpedo tubes and three 6-pounders.



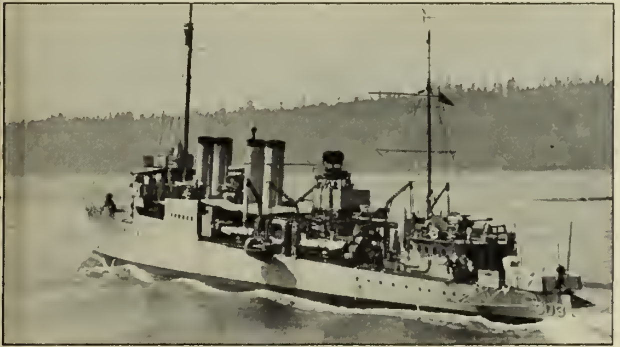
USS CHAUNCEY (DD 3) (BAINBRIDGE CLASS) Commissioned our third DD in 1902, the 250-foot torpedo-boat destroyer did 29 knots. She bore two 3-inch guns, five 6-pounders and two 18-inch torpedo tubes.



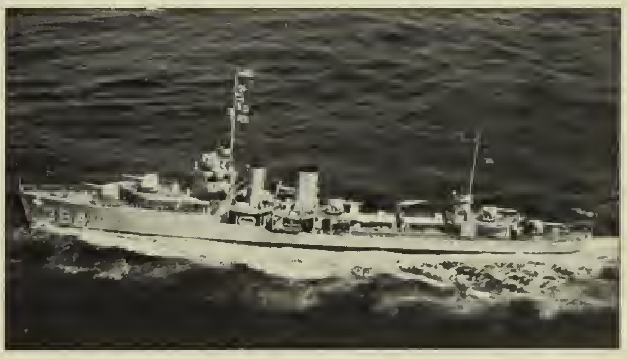
USS BEALE (DD 40) (FANNING CLASS) Commissioned in 1912, this DD with four stacks and raised forecastle carried a complement of four officers, 79 EMs. Three screws pushed her 787-ton normal displacement at 29.5 knots.



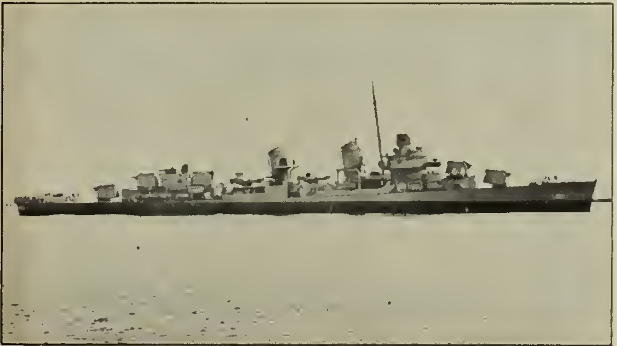
USS GWIN (DD 71) One of three flush-decked experimental DDs having three stacks instead of the four which would give the class its trademark, the 315-foot, 6-inch DD was commissioned 20 Mar 1920. She could do 30 knots.



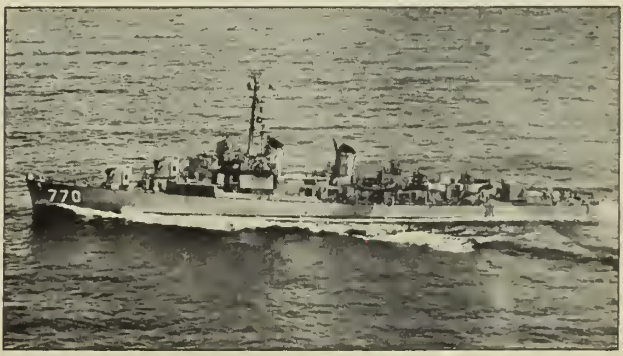
USS RENO (DD 303) Commissioned at San Francisco 23 Jul 1920, the 314-foot, 5-inch, flush-decked, four-stacker 'heavy boat' (normal displacement 1215 tons) bore four 4-inch guns, one 3-inch, and 12 21-inch torpedo tubes.



USS MONAGHAN (DD 354) (FARRAGUT CLASS) Commissioned in '35, the 341-foot DD fought aircraft and sank a midget sub at Pearl Harbor. She fought the Imperial Navy in the Pacific, was lost in a typhoon in 1944.



USS YOUNG (DD 580) (FLETCHER CLASS) Commissioned in July '43, this 376-foot DD served in the Pacific. She bore six 5-inch 38s, five 40-mm, seven 20-mm, two 21-inch torpedo nests (quint), depth charge tracks and projectors.



USS LOWRY (DD 770) (ALLEN M. SUMNER CLASS) Commissioned in July '44, the 376½-foot DD carried 325 men and 11 officers at 34 knots. She battled at Luzon, fought the kamikazes at Okinawa, received Unit Commendation.

Evolution

GOING OVER — Destroyers sail heavy seas on way to France in WW I.

No doubt the true origin of the destroyer lies in obscurity, but as far as we are concerned, its genesis might very well be found in the action against CSS *Albemarle* by 21-year-old Lieutenant William B. Cushing (see All Hands, page 59, September 1953) during the Civil War.

In the space of several months in the early part of 1864, *Albemarle* had defied the best efforts of the Union Navy to defeat her. In May she had fought a superior number of Federal ships to a standstill in a pitched battle in Albemarle Sound, causing severe damage to several ships and considerable embarrassment to the Union Navy.

Since no Union ships of similar strength were in a position to cope with the ironclad, LT Cushing volunteered to destroy her at anchor with a spar torpedo attached to the bow of a launch. He succeeded in getting his boat under the counter of *Albemarle* just as he was discovered.

Cushing exploded his torpedo, and blew out the bottom of *Albemarle,* which sank immediately. The launch was also sunk by the explosion, but Cushing and one of his men escaped. Two others were killed and 19 captured.

Cushing's launch was the forerunner of a new breed of ships—the torpedo boats. Nevertheless, the true torpedo boat did not appear until the advent of the self-guided torpedo, which was introduced in Europe in the 1870s.

A beginning was the 31-ton, wooden-hulled USS *Stiletto,* built in 1886 and purchased by the United States for use as a torpedo boat for experimental purposes. She was used primarily for training at Newport.

However, the first true U. S. torpedo boat was the 116-ton USS *Cushing*—named, most appropriately, after our LT Cushing who had been instrumental in sinking *Albemarle.* Commissioned in 1890, *Cushing* was 140 feet in length, had a beam of 15 feet, and carried a crew of two officers and 20 enlisted men. She was armed with three six-pounder guns and three torpedo tubes. A coal-burning type, she had a designed speed of 23 knots.

Between 1890 and 1908, 34 additional torpedo boats were commissioned or authorized, all somewhat similar to *Cushing.* But, by the time the last class had been built, they had reached a length of 175 feet, with a displacement of 175 tons.

ON THE LINE—During WW I the destroyer flotilla became valuable in antisubmarine and convoy work.

# of the Destroyer Family

Meanwhile, some 1200 torpedo boats were in service or in the planning stages throughout the world's navies. A counterweapon had to be devised to combat these new, fast and very dangerous ships which could, with relatively little expenditure of lives or money, threaten the major ships of any naval power.

The sinking of an iron warship by torpedo boats in the Chilean Civil War of 1891 startled observers. Again, in 1894 at Weihaiwei, Japanese torpedomen disabled 14,000 tons of Chinese naval vessels. It was obvious that something had to be done to neutralize this impudent new weapon.

THE ANSWER lay in the torpedo boat destroyer (the term was later shortened to simply "destroyer"), which first came into being in the fleets of the world in the 1890s. The torpedo boat destroyer had to be fast enough to catch enemy torpedo boats and gunned well enough to destroy them. In addition, she usually carried torpedoes of her own for use against likely surface targets. Her mission was soon enlarged to include such surface actions as had previously been delegated to gunboats, small monitors and naval vessels of similar caliber.

As a result, 16 torpedo boat destroyers of "about 400 tons displacement" were authorized by the United States on 4 May 1898. Of these, five ships—USS Bainbridge (DD 1), *Barry* (DD 2), *Chauncey* (DD 3), *Dale* (DD 4) and *Decatur* (DD 5)—were commissioned in 1902. (Strictly speaking, *Bainbridge* was not the first U. S. destroyer to be commissioned. *Bainbridge* and *Barry* were commissioned 24 Nov 1902; *Chauncey* was commissioned 20 Nov 1902; *Dale*, 24 Oct 1902; and *Decatur*, 19 May 1902. Nevertheless, because of her hull number, *Bainbridge* is generally considered to be the first U. S. destroyer.)

Bainbridge was a ship of 420 tons displacement, whose 8000 horsepower drove her at 29 knots. She was armed with two torpedo tubes, two three-inch guns and five six-pounders. Her career was not notably distinguished. She served with the Asiatic Fleet from 1904 to 1917 and with the U. S. Patrol Force at Port Said, Egypt, from 1917 to 1918. She was decommissioned in July 1919.

The construction of new destroyers continued at a brisk pace up to the first World War. Various improvements, such as the conversion from coal to oil and from reciprocating engines to steam turbines were included but, in spite of changes in design, DDs all had the same essential mission—to seek out and destroy enemy torpedo boats in large-scale surface fleet actions.

By the time hostilities were declared between the United States and Germany in 1917, 68 DDs had been commissioned.

BY THIS TIME, the destroyer flotilla had become a necessary adjunct to the scouting line, and World War I was to demonstrate the DD's value also in antisubmarine warfare and in convoy work.

The formidable German submarine threat required positive countermeasures if the Allies were to survive. Various weapons and methods were tried, some of the most promising of which were depth charges and underwater listening devices.

Destroyers found their main usefulness at this time in defensive antisubmarine patrol and convoy escort. Offensive antisubmarine warfare was largely untried because of weapon limitations. However, the adoption of the convoy system with destroyer escort proved quite successful in combating the submarines, and thus gave another role to destroyers.

It was in this sphere of activity that the old flush-deck four-stackers became best known. In all, 270 were commissioned between 1917 and 1922. They ranged from DD hull numbers 69 to 347, minus DDs 200 to 205, which were authorized but not completed, and 71 to 73, which might be called "three-stacked four-stackers."

A typical four-stacker—in addition to its four smoke stacks and flush deck—had a displacement of 1190 tons; length of 314 feet; beam, 30 feet, eight inches; draft, eight feet, eight inches; complement, 150; speed, 35 knots; armament, four 4-inch guns, two .30-caliber machine guns and 12 21-inch torpedoes.

Depth charges and additional antiaircraft machine guns were added

A BEGINNING—Torpedo boat USS *Stiletto*, built in 1886, fires a torpedo from port side during test run.

DESTROYERMEN tend their ships while in port at Queenstown in 1918.

later. Its primary mission was to sink enemy surface ships with torpedoes and to protect friendly battleships of the line from enemy surface craft. USS *Caldwell* (DD 69) was the first of this class.

During World War I, destroyers operating out of Queenstown, Brest and Gibraltar were used primarily for convoy escorts. The first U. S. destroyers, *Wadsworth* (DD 60), *Wainwright* (DD 62), *Conyngham* (DD 58), *McDougal* (DD 54), *Porter* (DD 59) and *Davis* (DD 65) arrived at Queenstown on 4 May 1917, within one month after declaration of war.

It was on this occasion that the historic exchange between VADM Sir Lewis Bayly, RN, and CDR J. K. Taussig, USN, took place. A destroyerman himself, ADM Bayly assumed that the U. S. ships would need some time for overhaul after their dash across the Atlantic. "How soon," he asked CDR Taussig at their first conference, "Will you be ready to go out on patrol?" Taussig's reply must have shaken (and encouraged) the admiral considerably: "We are ready now, sir. That is, as soon as we finish refueling."

By the end of the war, some 70 U. S. destroyers of various types were operating overseas. Some made the headlines; others did not. In June 1917, *O'Brien* (DD 51) severely damaged a U-boat with depth charges; a few days later, Taussig's flagship *Wadsworth* disabled a German sub; and before the month was ended, *Benham* (DD 49) dealt injuries to a third. In August, *Parker* (DD 48) also damaged a submarine, the *U-103*.

In November 1917, two U. S. destroyers, *Fanning* (DD 37) and *Nicholson* (DD 52), teamed up to finish a German submarine, the *U-58*. However, convoy duty wasn't all one-sided. Although *Fanning* and *Nicholson* may be said to be the first destroyers to sink a submarine, *Jacob Jones* (DD 61) was the first to be sunk.

About three weeks after the *Fanning-Nicholson* incident *Jacob Jones*, while steaming in the English Channel, was torpedoed by *U-53* and sank in eight minutes, taking 64 of her crew down with her. Although *Jacob Jones* was the only U. S. destroyer to be sunk by enemy action, *Chauncey* (DD 3) was lost through collision, and *Manley* (DD 74) was severely damaged in March 1918 when she was thrown against a British cruiser while coming alongside in rough seas. Eighteen of the destroyer's depth charges exploded, wrecking her stern and killing or wounding 56 of her crew. In October, *Shaw* (DD 68), her steering gear jammed, had her bow sliced off by the liner *Aquitania*.

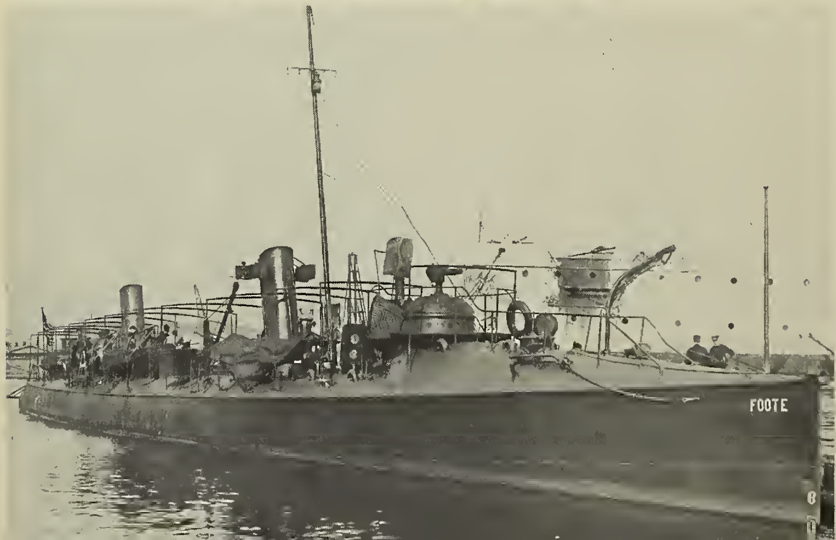
In addition to trans-Atlantic convoying and operations in British waters, U. S. destroyers conducted patrols in the Bay of Biscay and a division of small old-timers operated out of Gibraltar. A considerable number patrolled the East Coast of the United States in the summer and autumn of 1918 when U-boats crossed the ocean to invade U. S. coastal waters. Altogether, U. S. destroyers fought about 250 antisubmarine actions during World War I.

Between World War I and World War II, emphasis shifted back to the original mission of destroyers—action against surface vessels. They were fitted with more torpedoes, and took on the additional role of the craft they were originally designed to combat—the torpedo boats.

The destroyer was supposed to operate with the battle line and be used primarily to sink ships of the enemy line. Scouting, screening, antisubmarine and antiair tactics were all secondary. Tactical instructions issued by Commander Destroyers Pacific in 1920 say: "The Battle of Jutland and other experience indicates that the most effective use that can be made of destroyers is in conjunction with the gunfire of heavy ships in day action."

The prominent naval authorities of the time were in complete agreement that antisurface action was the primary mission of the submarine. Captain J. K. Taussig, who had led the first division of U. S. destroyers to arrive overseas in World War I, and who had seen the necessity for the escorted convoy, maintained nevertheless that the destroyer "in its proper offensive role, will have to lead torpedo attacks against capital

TORPEDO BOATS like *USS Foote, TB-3*, were built between 1890 and 1908.



ships. . . . The limit of depth charges should be fixed as the maximum number that can be carried without interfering with the other military characteristics."

In other words, all else was secondary to the delivery of the torpedo against the surface enemy. The design of destroyers between the wars reflected this philosophy as DDs became larger and longer-legged, with five-inch guns instead of the four-inch of World War I. One class, the *Craven* (DD 382), commissioned in 1937, featured 16, 21-inch torpedo tubes. However, because of the evident threat of submarines, depth charges and listening devices were made standard equipment. Also some automatic-firing antiaircraft weapons were installed, although not in the numbers later proved to be necessary.

During this period, 94 of the four-stackers were stricken from the lists due to treaty limitations. Another 10 were lost; three in collisions and seven at the famous grounding off Point Honda in California. The other 169 rotated between reserve and active commission until the late summer of 1940, when all were returned to active commission because of world tensions.

IN SEPTEMBER 1940, 44 of these four-stackers were transferred to the British and six to the Canadians, in return for 99-year leases on naval bases in the Bahamas, Jamaica, Antigua, St. Lucia, Trinidad and British Guiana. Those transferred to the British were designated the *Towne* class and named for cities common to both the United States and the United Kingdom. Those that went to Canada were named for rivers on the border between the United States and Canada.

During the war, six of the transferred destroyers were lost to enemy submarines and one to mines. Another, HMS *Campbeltown* (ex-USS *Buchanan*, DD 131) was used to ram the locks at St. Nazaire during a commando raid on that port. The next morning, the high explosive demolition charges aboard her blew up, wrecking the tidal basin and killing a large German inspecting party on board.

Also notable among the four-stackers was HMS *Stanley* (ex-USS *McCalla*, DD 253) which sank two German submarines in a running battle before she was finally sunk.

PAUSE TO REFILL — Destroyer of WW II task force is refueled underway.

Eight of the destroyers were transferred to Russia in 1944 by Great Britain, as partial substitution for one-third of the surrendered Italian fleet. Another, HMS *Bath* (ex-USS *Hopewell*, DD 181) was transferred to the Royal Norwegian Navy by the British. She carried out a successful raid on Oskfjord to destroy a fish oil plant whose products had been going to Germany for the manufacture of explosives. She was later sunk by a German sub in the North Atlantic.

NOTABLE FIRSTS for four-stackers during World War II include USS *Greer* (DD 145), the first U. S. destroyer to be fired on by a German submarine in World War II; *Reuben James* (DD 245), the first U. S. destroyer to be sunk by a German submarine; *Aaron Ward* (DD 132), the first U. S. destroyer to kill a submarine in the Pacific; and *Perry* (DD 340), the first Asiatic Fleet destroyer casualty.

In any event, the family of four-stackers got around. Consider USS *Stewart* (DD 224) which was ordered to be demolished while in drydock at Surabaja, Java, undergoing repairs after the battle of Badoeng Strait. She was officially stricken from the records on 2 Mar 1942 after her captain, LCDR H. P. Smith, ordered her scuttled.

She was resurrected by the Japanese and sent into service as Patrol Vessel 102. The confusion created by sighting an apparent U. S. vessel in Japanese waters was not resolved until more than three years later when, in October 1945, she was re-

DD SMOKER — Squadron 20 lays aircraft smoke screen in 1936 exercise.

TIN FISHING — DD men load torpedo tubes while in port in WW II.

covered and recommissioned by the United States. However, a new USS *Stewart* (DE 238) had been commissioned meanwhile, so the earlier *Stewart* was officially designated only as DD 224.

Action with the Asiatic Fleet gave the four-stackers their one opportunity to perform their original, designated mission of surface ship torpedo attack. USS *John D. Ford* (DD 228), *Pope* (DD 225), *Parrott* (DD 218) and *Paul Jones* (DD 230) sank four freighters and a patrol craft with torpedoes and gunfire at the Battle of Balikpapan in January 1942.

THE NORTH AFRICAN landings enabled the four-stackers to demonstrate their amphibious capabilities.

USS *Bernadou* (DD 153) and *Cole* (DD 155) were converted to assault destroyers and sent in to land troops inside Safi Harbor to seize the harbor and shipping installations. They carried an unusual recognition device, a parachute flare which was designed to release an American flag when fired, the idea being that the flag would float down, illuminated by the flare, and thus perhaps prevent the French defenders from firing on the ships.

USS *Dallas* (DD 199) was assigned the job of breaching the net and boom defense at the mouth of the Sebou River and making a dash up the river with a load of Rangers who were to take the airfield at Port Lyautey. Although fired upon by shore batteries at point-blank range, she made the run up and back with only minor damage, despite the fact that she was almost aground in the shallow river, kicking up mud constantly during the trip. *Bernadou*, *Cole* and *Dallas* were all awarded Presidential Unit Citations for their North African exploits.

FOUR-PIPERS also were prominent in Atlantic antisubmarine work. They formed the destroyer elements of four hunter-killer groups which received Presidential Unit Citations.

USS *Borie* (DD 215) was one of the most notable of these, particularly in her action on the night of 1 Nov 1943, when she damaged one German submarine with depth charges and then caught another on the surface. She engaged it with gunfire, finally rammed it, attacking with small arms, empty shell cases and even a bowie knife while alongside. She then pulled herself free and finally sank the submarine with gunfire. However, the ramming had caused uncontrollable damage and flooding to her forward engine room, and *Borie* went down after an all-night battle to save her.

Four-stacker action in the Pacific ranged from surface action off Guadalcanal through the entire campaign to Kamikaze attacks off Okinawa in the spring of 1945.

Four-stackers were converted for use as transports, seaplane tenders, minelayers and minesweepers.

USS *McFarland* (DD 237), for instance, had been converted to a patrol bomber tender before Pearl Harbor. But, unequipped with planes at that time, she was assigned antisubmarine patrol work and sank a Japanese submarine in July 1942. In October, she was severely damaged at Guadalcanal but managed to escape to Tulagi even though 30 feet of her fantail and her rudders had been blown off. She underwent emergency repairs at Tulagi with her own crew, sailed to an intermediate base and, finally, the 1000 miles to Pearl Harbor, arriving safely despite a heavy gale. She later earned a PUC for this outstanding action.

AFTER WORLD WAR II, the surviving four-stackers (31 were lost during the war) were largely scrapped. They accounted for a total of 11 German and three Japanese submarine kills during the war.

However, the war was not fought exclusively by four-stackers. According to Roscoe's *Destroyer Operations in World War II*, 248 new destroyers were added to the Fleet between December 1941 and September 1945, and between January 1943 and July 1945, 420 escort vessels were commissioned.

Over 50 DDs and DEs went on to win Presidential Unit Citations.

Pearl Harbor had demonstrated the need in all ships for increased antiaircraft weapons and long-range detection systems. Although destroyers saw considerable action in their historic and conventional roles against surface ships, as in the fighting off Guadalcanal and Samar, the nature of the war caused them to adopt two generally overriding primary missions—antisubmarine and antiair screens.

In the Atlantic, the German submarine threat required immediate defensive measures to keep the sea lanes open to Britain. Destroyers, first as convoy escorts in a role similar to that of World War I, and later as elements of hunter-killer teams, proved to be an effective answer to submarines.

The convoys and hunter-killer teams were reinforced by increasing numbers of escort vessels designed for quick and relatively inexpensive production to help combat the submarine menace. Although destroyers were used as amphibious support ships and for gunfire support in the landings in North Africa, Italy and France, their primary Atlantic mission was against the submarine. Sonar, which had been installed in only 60 active U. S. destroyers in 1939, and increased depth charge armament, became standard equipment as this major responsibility of the destroyer became recognized.

In the Pacific, with the development of the fast carrier task force as the principal means of naval power, the destroyers were used as antiaircraft screening ships. Detection of incoming raids, antiaircraft gunnery, and control of combat air patrol became primary destroyer missions and made necessary the installation of air search radars and more automatic-firing antiaircraft weapons. Destroyers were also used as radar pickets to screen amphibious forces. At Okinawa, 88 destroyers and 30 escort vessels were sunk or damaged while screening the landing force from Kamikaze attacks.

The *Fletcher* (DD 445), *Allen M. Sumner* (DD 692) and *Gearing* (DD 710) classes of destroyers which were designed and built during the war all reflected the lessons learned and the desire to make a general-purpose ship with capabilities to fight enemy surface, air or sub-surface units.

IN THE PERIOD before the Korean conflict, two specialized types of destroyers were evolved, which reflected the lessons of World War II. Many general-purpose destroyers were converted to either escort destroyers (DDE), designed for antisubmarine work with ahead-thrown submarine rockets, or to radar picket destroyers (DDR) with increased radar and communications facilities.

In the Korean conflict, destroyers performed neither antisubmarine nor antiaircraft functions to any extent. Used against an enemy with no navy and with control of the air solidly in United Nations hands, destroyers were used in support of amphibious landings and as blockading and interdiction fire support ships along the coasts of the peninsula.

The general-purpose design of World War II destroyers was vindicated as they performed hundreds of support missions—none of which resembled their World War II activity.

The action in Korea might be cited as an example of the uses to which the relatively modern destroyer may be put in a situation of less than all-out war. Fifteen or 20 destroyers were constantly on station in Korean waters throughout the entire war. Their jobs embraced almost all facets of sea warfare, except those which had been the primary missions of destroyers in WW II.

IN THE FIRST FEW DAYS of the Korean action, destroyers were called upon to evacuate U. S. nationals from Inchon and Pusan. Destroyers delivered gunfire support as the United Nations offensive began.

The neutralization of Wolmi-Do by the ships of DESRON Nine was typical. The six ships of the squadron steamed into narrow Flying Fish Channel in broad daylight, anchored at point-blank range off shore and conducted deliberate shore fire bombardment for two successive days preparing the island for assault and capture. Minefields and counter fire from shore batteries were the greatest obstacles to this operation.

When the use of drifting and fixed mines threatened to take away full command of the sea from the United Nations forces, destroyers were assigned to protect the minesweepers which worked well within the range of enemy shore-based batteries.

Destroyers patrolled much of the coast of Korea enforcing the naval blockade around the perimeter of the peninsula. While so engaged, they were called upon to deliver interdiction and harassment fire on railways, bridges and roads, thus helping disrupt enemy lines of communication. They also formed raiding parties with their whaleboats to capture enemy sampans and fishing craft and destroy targets ashore.

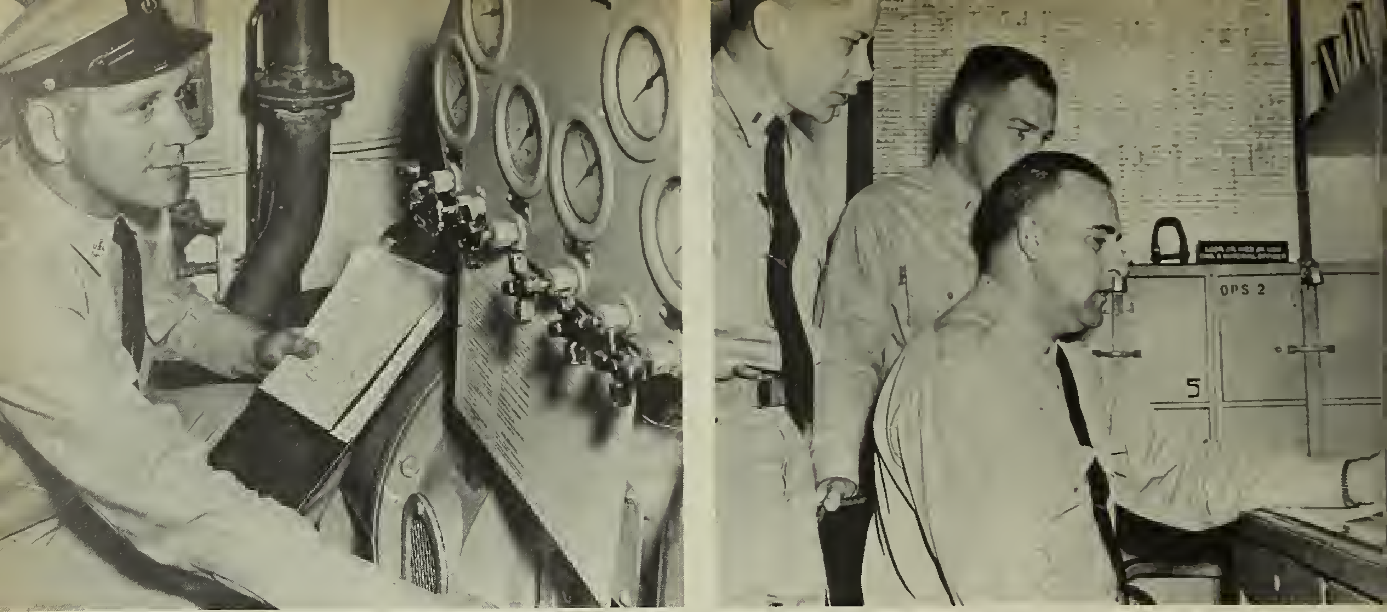
Train and truck busting were other typical missions for the destroyers' main batteries. They worked with Navy and Air Force planes in close concert, illuminating targets with star shells to aid the planes and, in turn, receiving spots from the planes to help the accuracy of their gunfire.

New classes including the *Forrest Sherman* (DD 931) type, destroyer leaders, guided missile destroyers and guided missile frigates have appeared in considerable numbers since Korea.

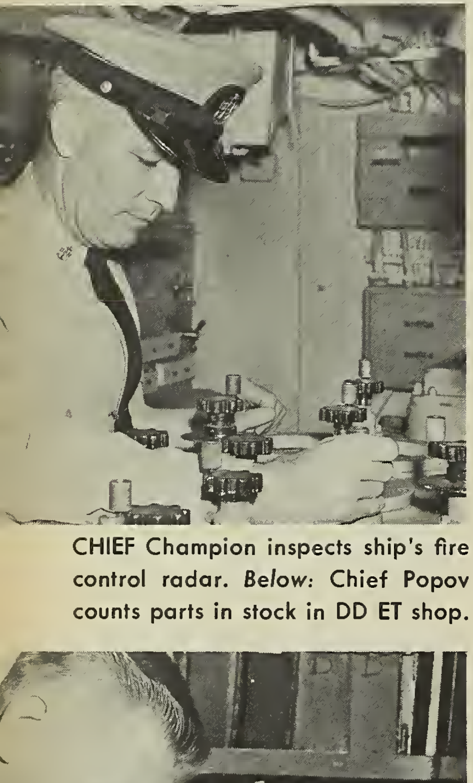
These generally feature increased size, greater detection equipment, and missiles. FRAM conversions have modernized the *Gearing* (DD 710) and *Allen M. Sumner* (DD 692) classes with better radar and sonar and more powerful antisubmarine weapons at the expense of torpedoes and conventional armament. The future employment of destroyers seems to be an extension of what they have done in the past, with newer tactics and weapons shaped by the advent of missiles and nuclear weapons.

—LT Phil Collins, USN.

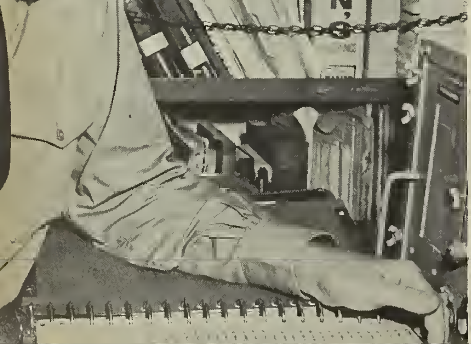
ACTION—Enemy bomber downed by DD hits sea at ship's stern during action south of Luzon in 1944.



DD DOCS—Chief Cooper checks throttle board. *Rt:* LTJGs Anderson and Rawcliffe and LCDR Ives read requests.



CHIEF Champion inspects ship's fire control radar. *Below:* Chief Popov counts parts in stock in DD ET shop.



Trouble-Shooting

EVERYONE HAS PROBLEMS. It's finding the answers that gives us difficulty.

This is not true, however, for Long Beach, Calif., based destroyers if their problems are of the engineering nature. The answer is probably available from the Material and Engineering Team of CRUDESPAC's Support Group. The nine-member Material and Engineering team currently operates from the destroyer tender, USS *Frontier* (AD 25). The team normally is concerned with inspection and engineering support of CRUDESPAC ships homeported at Long Beach.

The 10 officers and enlisted men who make up the team are all destroyer veterans and are top men in their particular field. LCDR J. R. Ives, Jr., USN, who has 25 years of enlisted and officer engineering experience, heads the department. His two officer assistants are LTJG L. H. Rawcliffe, USN, an engineering Limited Duty Officer (LDO), and LTJG H. D. Anderson, USN, an LDO electronics specialist. Seven chief petty officers who specialize in electronics, sonar, fire control, electrical engineering, as well as main engines, boilers and associated auxiliary machinery, round out the experienced team.

The team isn't needed just because the ships' crews are not doing their jobs. Destroyer crewmen have a reputation for being capable and versatile, but as individuals, they may lack experience with a particular piece of equipment or with one type of problem. A knotty problem to an individual destroyerman may be a routine matter for a more experienced member of the M & E team.

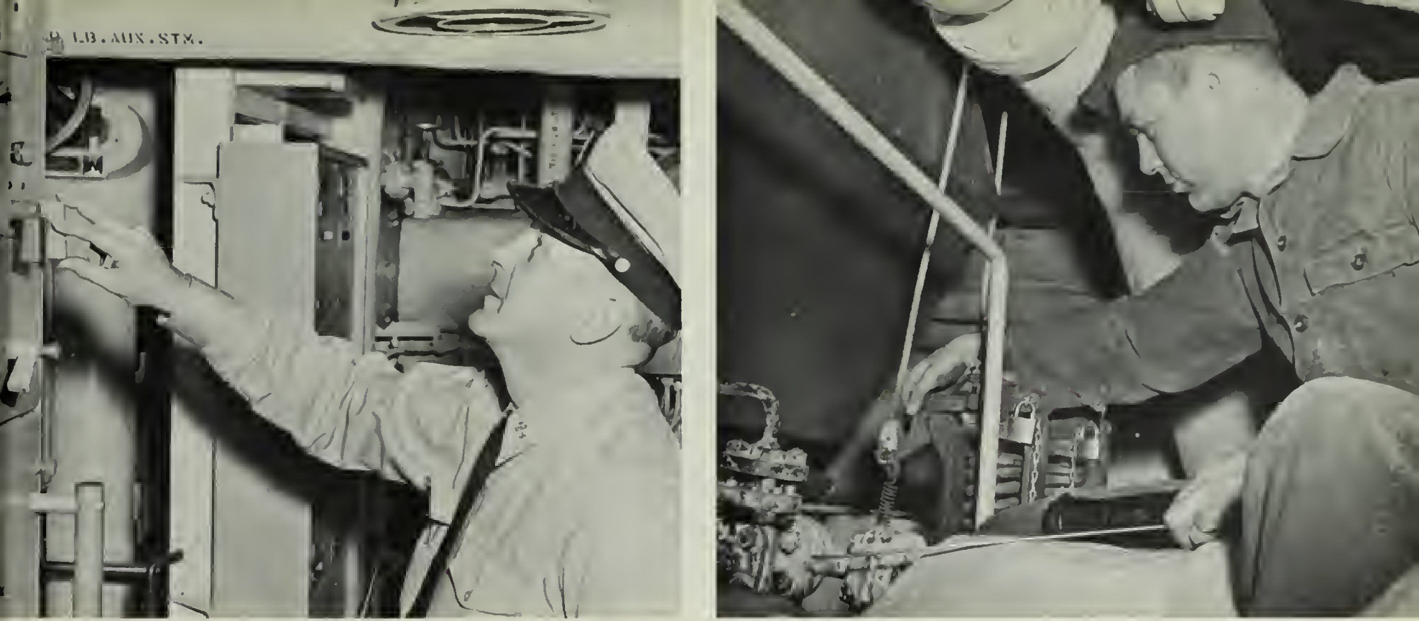
When time permits and men are available, team members also do research to develop new or more economical repair methods or to develop new techniques to conserve manpower or material.

The department uses the latest and best methods known to them. Recently, for example, they used a product that is more often associated with household use then shipboard use—hydrogen peroxide. The housewife uses it as a cleaning agent. The team does too, but on a larger scale. They clean the firesides of a ship's boiler.

LTJG Rawcliffe claims that the Support Group's engineering team was the first afloat activity in the U. S. Navy to use this method. Normally the boilers are hand scraped and washed with water pressure. Team members say the hydrogen peroxide method is better and is the only positive means they know to remove all the carbon buildup.

The team was formed for only one reason—to help the ships maintain top battle readiness. The team holds a two-part inspection for ships slated for overseas duty—one at sea and one in port.

During the at-sea inspection, LTJG Rawcliffe and several chiefs



INSIDE JOB—Chief Degischer adjusts boiler safety valves. *Rt:* Chief Lewis looks over ship's switchboard.

Team on a Tincan

who specialize in below deck engineering and sonar, ride the ship to observe the equipment and procedures in the engine room and fireroom.

When the ship returns to port, other members of the team come aboard to examine the operation of electronic, fire control and radar systems. This inspection is generally done in port since the systems cannot be thoroughly checked while the ship is underway.

Also while in port, Senior Chief Boiler Tenders Edward G. Blythyn and William W. Degischer, both veterans of destroyer and destroyer tender duty, inspect the ships' boilers and associated auxiliary equipment.

These two chiefs leave the office in the morning looking like white collar workers. Later, after they have changed into their coveralls and spend the day climbing through boiler steam drums, firesides, and in and around other fireroom equipment, they look like members of the old Navy's coal-shoveling black gang.

Chief Electrician's Mate Thomas M. Lewis, USN, is the team's electrical inspector. He visits ships that request assistance and helps them solve any problems in the ship's electrical, gyro or interior communications equipment.

Senior Chief Machinist's Mate Thomas C. Cooper is the machinery inspector for the engineering team. Chief Cooper has served aboard destroyers and tenders most of his time in the Navy. Like Chief Lewis, he visits ships that request advice and assistance on a wide range of problems. His primary target during inspections, however, is preventive maintenance in the main engines and associated engine room auxiliary machinery.

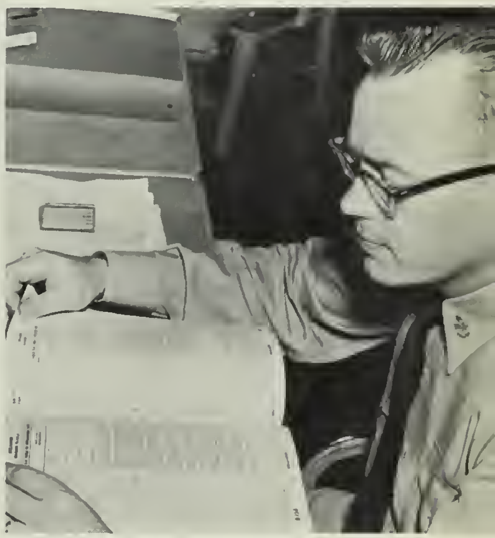
Aligning ship's guns with the fire control radar and calibrating them for accuracy is the job of Chief Fire Control Technician Charles J. Champion. This job is often done by the ship's crew, but when they request assistance, Chief Champion lends a hand.

The team's sonar specialist is Senior Chief Sonarman Robert P. Easterday. In addition to inspecting the ship's sonar gear, Easterday provides technical assistance and instructs crewmen while he works with the equipment.

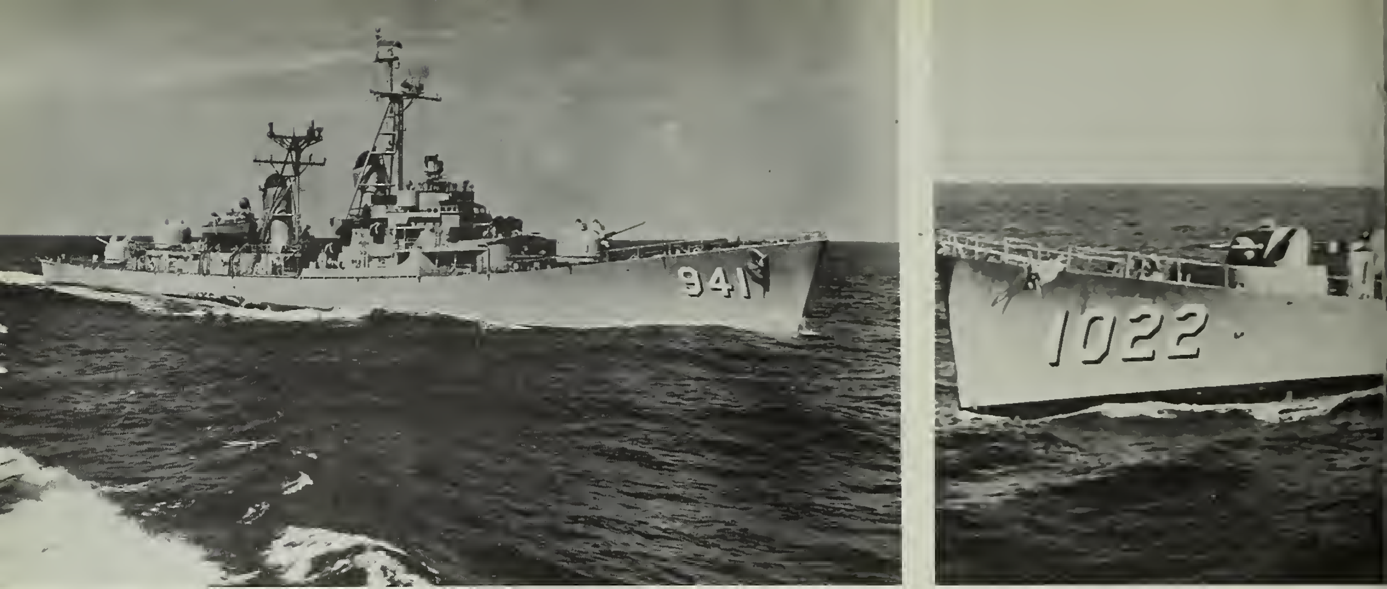
LTJG Anderson and Chief Electronics Technician V. V. Popov team up as the specialists in electronics. They check the electronic logs, the performance of the equipment and the operation of antenna systems. They also provide other electronic assistance when needed.

Through the constant work, inspection, advice and help of the Material and Engineering Team, many Long Beach based destroyers operate a lot longer and with fewer breakdowns then they would otherwise.

—Dennis E. Aufranc, JO3, USN.



LOGGING—Chief Easterday studies sonar parts and operation log. *Below:* Steam drum is checked out.



HOME IN FOAM — *USS DuPont* (DD 941) cuts through sea. *Rt:* DE, *USS Lester* (DE 1022), is *Dealey* class.

Destroyers Have Lots

This is a picture album of a prolific family—the destroyers. Since the day the family was founded in the second year of the 20th century, it has played an important part in world events. At least once it was a factor which turned the tide of history.

The family is big. There are more destroyers than any other ship in the United States Navy. Singly, one will probably never become the most important ship in the Navy. Of the destroyer family, however, men will say, as their wives have frequently remarked when using tin cans, "How did we ever get along without them?"

The earliest members of the family were authorized in 1898 during the Spanish-American War. They were called torpedo boat destroyers and reasonably enough, their function was to destroy torpedo boats.

Here are some members of the family as a class:

Destroyers (*DDs*) — One of the earliest members of this branch of the family was USS *Bainbridge* (DD 1). She was one of the torpedo boat destroyers authorized in 1898, and was commissioned on 24 Nov 1902.

Bainbridge was a lightweight (only 420 tons) and was armed with two three-inch guns, five six-pound cannons and two torpedo tubes. Her top speed was about 28 knots.

Except for the big switch from coal to oil, destroyers didn't change much until World War I.

German U-boats had wrought havoc with Allied shipping from the first moments of the war. Before the fighting in Europe ended, 2770 Allied and neutral ships totaling 14,500,000 tons had been sent to the bottom by torpedoes.

When the United States entered the war, the German high command couldn't have cared less, for—according to the German timetable—the U-boat offensive would finish off the Allies by the first of August 1917.

So far as the Germans knew, the United States Navy had nothing which would deter them from their purpose.

They were mistaken. The United States Navy had the destroyer, and it soon became apparent that the destructive American tin cans were a major weapon which could effectively be used against the German subs.

More convoys, guarded by destroyers, increased the flow of food, material and men to Europe, and the tide turned against the Central Powers. By war's end, the effectiveness of German submarine warfare was nil.

During World War I the newly developed flush-deck four-pipers, so-called because of their four stacks, rapidly replaced the earlier types, identified by their raised forecastles. USS *Caldwell* (DD 69), led the parade of four-stackers.

Their missions included scouting, screening for the Fleet, fast torpedo attacks, smoke screens and hot gun actions.

They were a youthfully insolent kind of ship with a maximum speed of 32 knots and average displacement around 1200 tons.

Their major armament consisted of 12 torpedo tubes and four 4-inch guns. They even sported submarine detection gear, which had just been developed, and were later equipped with antiaircraft guns.

Congress had authorized the construction of about 300 four-pipers by 1918. After peace returned to the world, however, no new destroyers were authorized until the 1930s. In 1933 and '34 some 70 new destroyers were authorized. As a result, nine new classes of destroyers—*Farragut* (DD 348), *Porter* (DD 356), *Mahan* (DD 364), *Somers* (DD 381), *Craven* (DD 382), *McCall* (DD 400), *Sims* (DD 409), *Benson* (DD 421), and *Livermore* (DD 421)—made their appearance in the Fleet between 1935 and 1940.

The years between 1940 and 1944 belonged largely to the *Fletcher*-class destroyer. This is the member of the family whose profile is most familiar to World War II Navymen

SPEEDY — USS *Ingraham* (DD 694), shown before FRAM, is *Sumner* class DD. *Below:* DD men work on line.

# of Class

and to destroyermen in today's Navy.

The familiar flush-deck *Fletcher*-class destroyers were armed with five 5-inch guns in single mounts and two sets of quintuple torpedo tubes.

One hundred and nineteen *Fletcher*-class destroyers were laid down during the Navy's 1940-41 shipbuilding program. Another 56 were laid down in 1942 under design which was modified to include lower fire control directors and flat-faced bridges.

The *Fletcher*-class destroyer basked in the limelight until 1944 when USS *Allen M. Sumner* (DD 692) was commissioned. The *Gearing* (DD 710) class which, for a few years, was the largest of U. S. destroyer types, appeared in 1945.

The *Gearing*-class had a standard displacement of 2425 tons and the *Sumner*-class displaced 2200 tons. The *Sumners* were shorter than the *Gearings* by about 14 feet. Most specialized DD types are converted *Gearing, Fletcher* or *Sumner* hulls.

The newest and largest DD type is the *Forrest Sherman*-class. Ships in this class displace 2780 tons.

Although not a class like *Sherman* or *Gearing*, the FRAM I and II conversions are also becoming a major DD type in today's Navy.

ESCORT VESSELS first made their appearance during World War II, when they were mass-produced

FRIGATES ALL — USS *Dewey* (DLG 14) was first of series of DLGs. *Rt:* Frigate USS *Willis A. Lee* (DL 4).

(about 400 were commissioned) to relieve the full-sized destroyers from convoy duty—hence the official designation of escort vessel.

World War II DEs can be divided into two main categories—short-hulled (289 feet) and long-hulled (306 feet).

The short-hulled DEs were originally a British design. They had a standard displacement of about 1150 tons and had diesel-electric propulsion with a top speed of about 20 knots and a range of about 6600 miles. They had no torpedo tubes but carried three 3-inch/50 dual-purpose guns.

Standard displacement for the long-hulled groups was 1275 tons. Many had geared steam turbines and could do about 24 knots. They had a range of some 6000 miles.

The long-hulled DEs' three 21-inch torpedo tubes packed considerable punch, as did their two 5-inch/38 dual-purpose guns. Some classes have 3-inch/50 caliber guns rather than the 5-inch/38s. Each version carried several 40mm and 20mm machine guns, one multiple hedgehog and eight or nine single hedgehogs.

Hedgehogs, incidentally, could be described as underwater shotguns. During World War II, USS *England* (DE 635), in teamwork with *George* (DE 697), *Raby* (DE 698) and *Spangler* (DE 696), put on a performance that bid fair to hedgehog the Japanese submarine force out of existence.

On a rampage in the Solomons, *England* destroyed six Japanese submarines in 11 days—a feat that broke two world records.

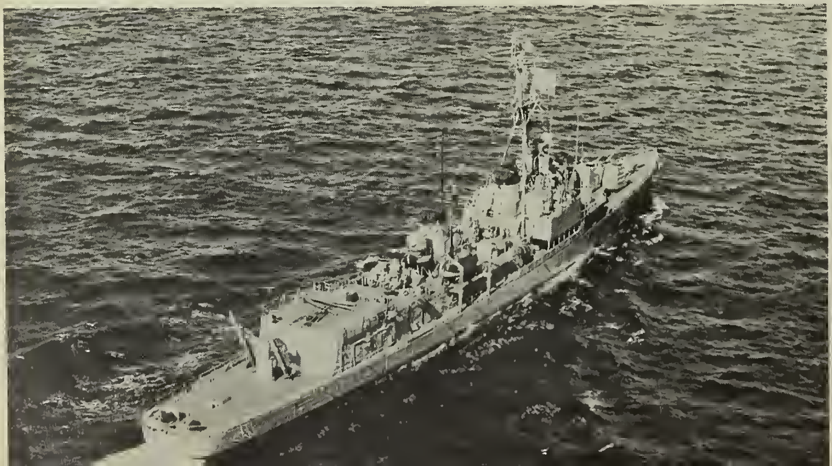
At war's end, the short hulls were sold and many of the long-hulled DEs went into mothballs.

AROUND 1954, a new line of DEs began to appear in the Navy's orders—the *Dealey* (DE 1006) class.

The new models—with the exception of *Dealey* (DE 1006), *Cromwell* (DE 1014), and *Hammerberg* (DE 1015)—had an all-aluminum superstructure and a low silhouette which made them difficult for submarines to spot. Their hull design permitted high-speed running under sea conditions which would have been a considerable handicap to World War II-vintage DEs.

Their detection devices and armament were the latest in defensive and offensive ASW gear and they rated high in habitability.

NUMBER ONE — USS *Gyatt* (DDG 1) was first DD with guided missiles.



Dealey-class DEs were powered by steam turbines which developed 20,000 shaft horsepower. Their single screws moved them along at about 25 knots.

Until *Dealey* came along, DEs had been considered too slow to serve in modern hunter-killer groups or the ASW defenses of fast carrier forces. Now, however, the modern destroyer escorts are able to handle these jobs well.

In addition to the *Dealey*-class DEs, there is also the *Claud Jones* (DE 1033); the first in a series of diesel-driven antisubmarine escort vessels.

The features which distinguish *Claud Jones* from her predecessors, aside from her propulsion, are her upper deck arrangement, aluminum masts and deckhouse and improved electronic detection equipment.

IN 1950, the DEs which had been mothballed at the end of World War II began leaving their nesting places for conversion and duty as **Radar Picket Escort Ships** (DER) in Continental Air Defense.

The ships' combat information centers were enlarged to handle increased information from air-search, height-finder and surface-search radar. More communication equipment was installed to handle the voice and ship-to-shore communications so necessary to an effective warning system. They carried the same improved sonar carried by the *Claud Jones* class.

Much of the new gear was put into spaces which had been used for messing and berthing when the ships were strictly DEs. This meant the center portion of the main deck had to be enclosed and a superstructure added to provide living spaces.

MODIFIED DDs and DEs have picket duties. *L. to rt:* USS *Leary* (DDR 879) and USS *Newell* (DER 322).

The modifications brought the DER displacement up almost to that of the pre-World War II destroyer.

To keep the ship's weight down, prefabricated aluminum was used in the alterations. Even the tripod mast for the radar antennas and the huge deckhouse were constructed of aluminum.

Even so, more than 60 tons of pig iron had to be placed in the bilges and voids as ballast to offset the added topside weight.

No modifications, however, have been made to eliminate the rolls of 40 degrees or more which rotate the ship from one side to the other every few seconds. Such rolls are routine in a picketeer's life.

However, after being tossed to the deck in the middle of the night a few times, a man soon acquires the knack of sleeping soundly while clinging to his bunk like a cat in a weaving treetop.

RADAR PICKET DESTROYERS (DDRs)—are *Gearing*-class destroyers from which the torpedo tubes and tripod radar mainmast have been removed, the radar being located aft of the number two stack and on the foremast of all ships.

They are fitted with early warning radars as are many DDs. Some have been FRAMmed and are equipped with DASH and variable-depth sonar.

The men who serve in them swear they roll as well as the DERs.

Antisubmarine Destroyers (until recently designated as DDEs and now classed with other DDs) have been equipped with the last word in submarine detection and destruction equipment.

Frigates (DLs)—are of two types. The DL 1 (*Norfolk* type) was originally designed as a special class of antisubmarine ship of cruiser size to engage in hunter-killer operations.

Norfolk was once designated a CLK (Cruiser, Hunter-Killer Ship) and has a hull resembling a *Juneau*-class cruiser.

The second type of DL is the *Mitscher*-class. These were begun as DDs but redesignated DLs while under construction. *Mitscher*-class ships were specifically designed and constructed as long-range Fleet-type destroyers for antisubmarine duties. They carry advanced surface, underwater and antiaircraft weapons.

It might be said here that new construction of conventionally armed frigates has been discontinued.

Guided Missile Destroyers (DDGs)—The first ship built as a DDG was USS *Charles F. Adams* (DDG 2). She was one of eight authorized by Congress in Fiscal Year 1957. Thirteen were authorized between FY 1958 and 1960 and two during the FY 1961 program. (USS *Gyatt* (DDG 1) is a converted *Gearing* class and is the only one of her class.)

The first eight DDGs were armed with *Tartar* missiles and the latest in long range ASW weapons. They are used to escort amphibious forces and to support them after landings. They also work with hunter-killer groups.

They have a greater displacement than their predecessors, with their hull design evolved from *Forrest Sherman* (DD 931). Like *Forrest Sherman*, they have an aluminum superstructure and are a favorite from a habitability standpoint.

Guided Missile Frigates (DLGs)—USS *Dewey* (DLG 14), number one in a series of 10, was the first ship to be built from the keel up as a guided missile frigate.

There was a time when living conditions aboard a frigate or, indeed any ship, were less than the ultimate in the good life. Men slept in hammocks swung from hooks set into beams and carlings of the overhead on the lower deck. Mattresses stuffed with rags and shavings made the occupants of the hammocks a little more comfortable, while dogs'-hair blankets covered them.

Food consisted of sea-bread, raw salt pork, cold potatoes and vinegar. Meals were eaten from a squatting position on the deck.

Since then, however, conditions have changed. Crew members of *Dewey* counted themselves lucky when they first saw their quarters. More emphasis had been placed on bunking comfort and comparative privacy. Full-sized lockers, integral to the bunks, were large enough to stow the contents of the largest seabag, and the entire ship is air-conditioned.

Dewey's bridge is fully enclosed. The accent is on visibility, which provides added efficiency and comfort for all topside watchstanders.

BRIDGE WORK—Destroyermen man the signal bridge of the escort ship USS *Van Voorhis* (DE 1028).

Dewey's twin missile launcher handles *Terrier* missiles which are capable of destroying aircraft traveling at supersonic speeds and at altitudes above those reached by conventional gun systems.

Missiles are selected from below-deck magazines and placed upon a launcher which is trained, elevated and fired automatically. The operations are directed from a weapons control station on the lower level of *Dewey's* split-level combat information center.

The missiles are backed up with five automatic rapid-fire guns: a 5-inch/54 and two twin 3-inch/50s. The latter are on a separate fire control system.

Closed-circuit TV enables the CO and conning officer to obtain a continuous picture of the summary plotting board in the combat information center. They can thus obtain a view of all air and surface targets held by radar. The same TV also serves the weapons control in the lower level of the CIC.

Dewey is also equipped with *Asroc* and has a pair of triple-tube torpedo mounts on the main deck.

Dewey has a lightweight superstructure—375 tons as opposed to 1000 tons in conventional construction, and her bow design lessens considerably the effect of bow waves.

Nuclear-powered Guided Missile Frigates (DLGNs)—The last picture in the family album shows the first member of a new generation.

Appropriately, she bears the same name as one of the first members—*Bainbridge*. She is due for commissioning this month.

Bainbridge is armed fore and aft with guided missiles, as are her sister frigates beginning with *Leahy* (DLG 16). The DLG 6 class, including *Dewey* (DLG 14), has only one launcher, which is located aft. The distinguishing feature of *Bainbridge* is, of course, her nuclear propulsion.

That's the family which has increased from a handful of torpedo boat destroyers at the turn of the century to the force of ubiquitous multi-purpose ships the destroyer family consists of today.

Although other types have, by and large, assumed to themselves the glamor of life at sea, destroyers and destroyermen have surrounded themselves with something of a legend built of sheer hard work, discomfort and danger. —Robert Neil.

Stickell Is No Stick-in-Mud

The Navy, as you're no doubt aware, gets around—from the largest ports in the world to the far, far boondocks. And destroyers generally go gallivanting as much as or more than anyone.

A recent example was the Sixth Fleet radar picket destroyer USS *Stickell* (DDR 888), which transited the Bosporus Strait for a week-long good-will visit to the small Turkish villages of Sinop and Trabzon on the northern coast of the Black Sea.

Sinop and Trabzon are not exactly major ports of call. *Stickell,* as a matter of fact, while it should know better in light of recent issues of ALL HANDS (Visit to Basra, March 1962, Shooting Down Dux, June 1962), lays claim to being the *first* U. S. Navy ship ever to visit Sinop. In any case, the citizens of both communities proved to be curious, friendly and receptive—and *Stickell's* crew took advantage of the opportunity to people-to-people it up a storm. They received the same kind of treatment right back.

At both locations, *Stickell's* deck swarmed with wide-eyed visitors during open-house hours. At Sinop the ship presented books and other educational materials to the local high school. A highlight of the Trabzon stop was a tour the ship hosted for 50-plus orphans aged six to nine—a tour which proved to be as much fun for the sailors as it was for the children. Sound-powered phones and the engine order telegraph yielded "Christmas morning" fascination for the moppets, and later, on the mess deck, there was a party complete with cartoon movies, ice cream, coloring books, crayons, marbles and balloons.

In addition, *Stickell* gained added favor with the populaces of both Sinop and Trabzon when COMDESDIV 262, embarked aboard, laid wreaths at the towns' Ataturk memorials.

ORPHAN VISITOR adds turns to *Stickell's* engine order telegraph.

Destroyer School

An enlisted engineer could spend many months or perhaps years in engine and boiler rooms of destroyers and still not gain a knowledge in the maintenance of shipboard machinery and equipment equal to that offered in a four-week course at the U. S. Naval Destroyer School, Newport, R. I.

Although the school exists mainly to educate junior officers for department head duties, a month-long course is available to second and third class BTs, MMs and EMs. (See the article in the May 1962 issue, P. 2.)

In addition to receiving classroom instruction, enlisted students spend considerable time in the engineering shop learning the fundamentals of machinery similar to that found in destroyer type ships.

The students brick boilers, tear down and rebuild pumps and, in general, acquire an education obtainable only in an installation of this type.

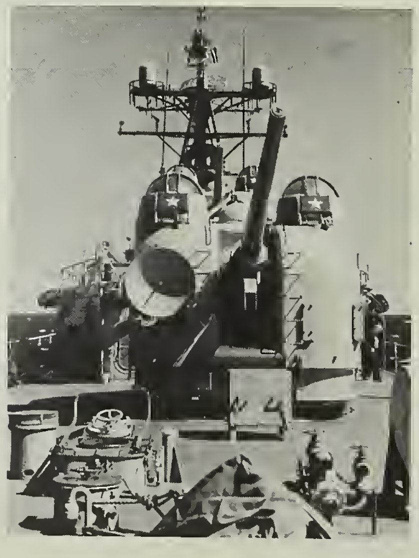
Clockwise from top left: (1) Instructor, C. C. Miller, BTCS, observes student, R. L. Eudy, BT3, testing water in the Destroyer School's laboratory. (2) Receiving instructions on rebricking an "M" type boiler from S. P. Kapnis, BTCS, are R. D. DeManche, BT3, and G. L. Bryant, BT3. (3) Boilermen W. L. Taggert, S. T. Swoyer and D. S. Harper watch instructor demonstrate rolling and plugging tubes in a boiler superheater header. (4) R. W. Osean, MMCM, points out various parts of the main thrust and journal of a destroyer's high-powered turbine to Machinist's Mates D. G. Acosta, I. R. Griffin and L. Murphy. (5) Receiving instruction on a forced draft blower from S. P. Kapnis, BTCS, are Boilermen D. Norris, S. T. Swoyer and C. R. Bowmann.

The DD Role in ASW

THE DESTROYER is the historical opponent of the submarine. In both World Wars the submarine campaign against maritime shipping came uncomfortably close to halting the flow of men and material to the fighting fronts. In each case the DD has played a major role in defeating this threat.

Looking at antisubmarine warfare of the past we find that the submarine first became an important factor in World War I after Germany declared unrestricted submarine warfare on all Allied shipping. The German timetable figured that the submarine would force the end of the war by August of 1917. The British estimate differed only by a couple of months in this grim assessment of the submarine's capabilities. The entrance of the United States in the war would have had little effect had the submarine been allowed to go unchecked, since it would effectively seal off the front from American supplies.

However, in the spring of 1917 the solution was finally developed. It was not the startling, fantastic invention for which the press of both England and America had been clamoring. It was a concept that was familiar to naval thinking since the days of sail. It was simply the merchant convoy. Destroyers assigned to escort groups of merchant ships in convoys changed the whole balance of antisubmarine warfare. The first successful convoy, said Admiral W. S. Sims, Commander of U. S. Naval Forces in Europe during World War I, "meant that the Allies could win the war."



THE REASON for the tremendous importance of the convoy is simple—it shifted antisubmarine warfare from the defense to the offense. Destroyers were no longer employed in fruitless random patrols, hoping they would come across a submarine by chance, or speeding to the assistance of a sinking ship only to find the attacking submarine long departed from the scene.

With destroyers forming a protective screen around the convoy, submarines were forced to fight their way through the encircling destroyers to get at the merchantmen. On sighting a periscope or torpedo wake, the destroyers could swing immediately into action with a depth charge barrage, or turn to ram if the sub were on the surface.

The losses to merchant shipping,

which in April of 1917 alone were over half the previous year's total of new construction tonnage, soon dwindled appreciably. American supplies and men, protected by the ubiquitous destroyer, changed the complexion of the war. At the end of hostilities it was the proud boast of the U. S. Navy that not one life had been lost in troopship convoys escorted on their way to the battlefield by American destroyers.

In World War II convoy protection was again a major concern of Atlantic Fleet destroyers.

Although insufficient escorts were available at first, by mid-1942 the coastal convoy system had been set up. An interlocking system encompassing the Caribbean and Gulf ports followed soon after. Convoy schedules similar to railroad timetables were made up. Express lines joined major ports, with local runs tying into those from lesser seaports. Every convoy run got at least some protection from surface escorts. To help solve the need for large numbers of escorts, escort vessels (DEs) went into mass production. This ship, designed expressly for convoy work, sacrificed speed, size and guns in order to obtain endurance, maneuverability, antisubmarine capability, and most importantly, ease of construction. Approximately 400 of these were completed by the end of the war. They were invaluable in the antisubmarine effort.

THE CONVOY SYSTEM continued throughout the entire war, essentially unchanged from the original World War I concept. The typical convoy was an impressive sight—70 to 100 freighters and tankers of mixed Allied flags steaming in 10 to 15 columns, 800 to 1000 yards apart, and each ship closed up to 500 yards from the ship ahead of it.

Outside the main body steamed the screen of destroyers continually searching with sonar and radar for submarines and enemy aircraft. The purpose of the convoy remained the same. It forced the submarine to come to the destroyer to get at the convoy. This concept is as valid today as ever before.

In mid-1943 another antisubmarine weapon, the hunter-killer group, was employed in the Battle of the Atlantic. The airplane is invaluable in antisubmarine warfare. Its speed and range make it an ideal patrol and detection platform. Armed with depth charges and bombs, patrol planes made many detections and kills in the early war years.

ON THE KILL — *USS Hammerberg* (DE 1015) fires *Alfa* against enemy.

However, the range of even the longest-legged patrol craft left a large mid-ocean area without any airplane coverage. Attack carriers were too scarce to be spared for the battle.

Into the breach came a new team —the escort carrier (CVE) and the DD. The first of these teams joined the Fleet in 1943. These groups were employed initially as an adjunct to the convoy with the destroyers augmenting the regular screen, and the escort carrier steaming between the rows of merchant ships.

Soon, however, it became apparent that the carrier groups could be employed more effectively if not tied down to a particular convoy. Their commanders were given wide latitude in their orders to break off at their discretion and prosecute likely submarine leads. Intelligence from other sources, airplane sightings of submarines, sinking ships—all these might give a tip-off of the presence of a submarine. The HUK groups were free to sink submarines wherever they might be found. "Operate against enemy submarines in the North Atlantic" was a typical order given by CINCLANTFLT to one of his

THE LATEST in detection gear keeps destroyers a strong ASW weapon.

HUNTER KILLER groups hunt down enemy subs from the air and surface. Here, P2V *Neptune* teams up to hunt with *USS Forrest Sherman* (DD 931).

HUK group commanders in 1944. These were ideal groups for wide-ranging operation. Combining the speed and range of the airplane with the staying power and kill ability of the destroyers, they helped materially in retarding the effectiveness of the submarine.

DESTROYERS TODAY are capable of resuming their traditional roles in convoy escort and hunter-killer groups. On both coasts they engage in constant exercises designed to keep them abreast of the latest tactics and developments in the antisubmarine struggle. HUK groups rotate constantly to the Sixth and Seventh Fleets, maintaining a ready alert.

But just how do destroyers stand today? Have the spectacular advances of submarines with nuclear power rendered them obsolete? By no means; they're as busy as ever.

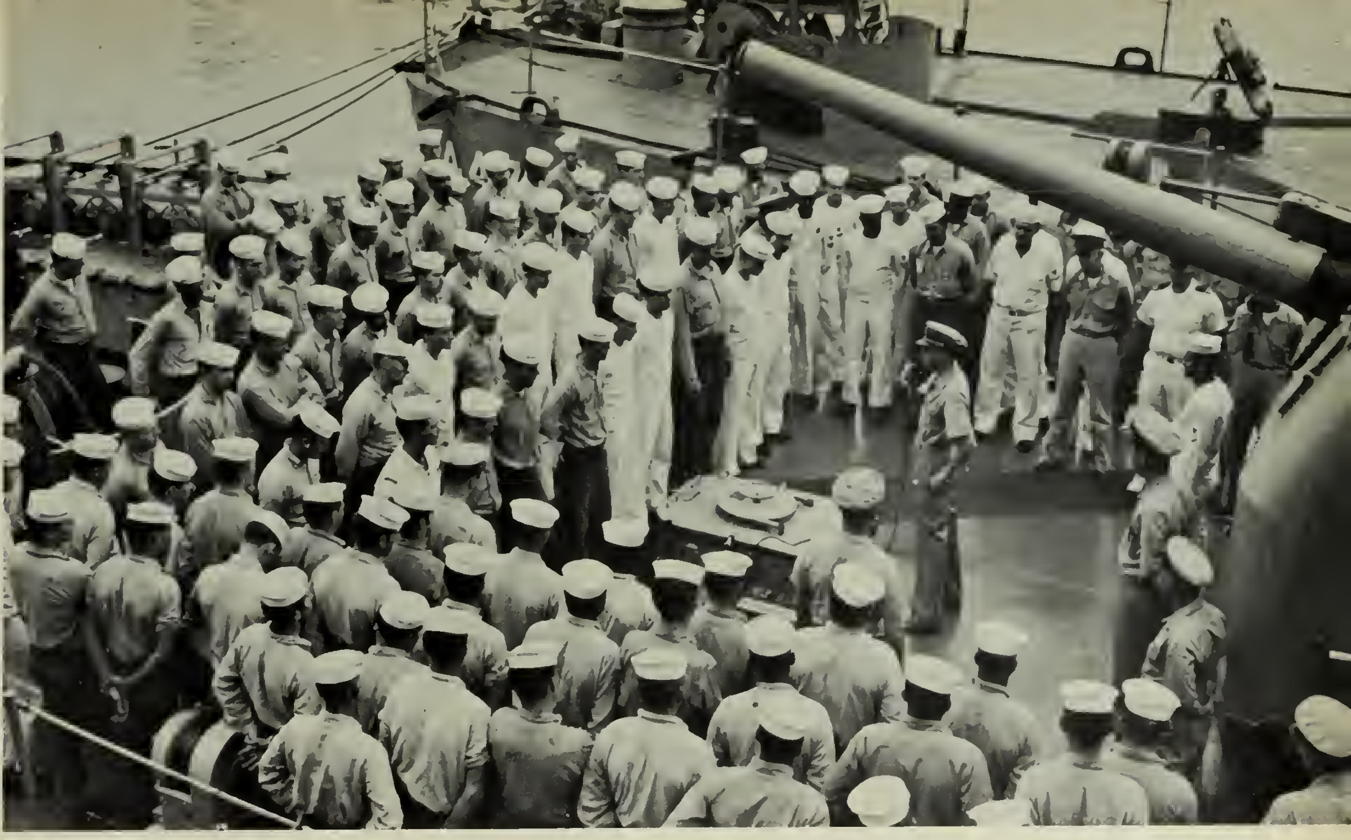
Despite all the improvements made by submarines, the destroyer is better off today than ever before in its antisubmarine posture. In both World Wars I and II, the destroyer was forced to get on top of the submarine in order to attack. Depth charges must be dropped from directly overhead to be effective. Hedgehogs are fired from a distance measured in yards.

While these weapons were effective, and have accounted for many submarine kills, their delivery involved a major disadvantage for the destroyer. It had to close through the entire torpedo range of the submarine to make an attack. This could be dangerous almost to the point of suicide.

Today's destroyers, both the new DDGs and DLGs and the FRAMs, have far superior weapons. *Asroc* and DASH give the destroyer a weapons system that measures itself in miles. Coupled with new high-powered sonars with greatly increased range for detection, these weapons for the first time allow the destroyer to deliver an attack outside the effective retaliatory range of the submarine.

Obviously, problems still remain. The Arctic, under-the-ice operations of nuclear submarines and the *Polaris* capability of our FBM subs pose grave antisubmarine dilemmas. However, new threats will continue to bring the development of newer defensive measures. It seems certain that destroyers will remain in the forefront of antisubmarine activities.

LOW BLOW — Pacific Fleet destroyer drops depth charges on sub while under cover of smoke screen.



Destroyerman, USNR

Among the 40 Naval Reserve training ships ordered to join the Fleet in last fall's military buildup, 13 were destroyers and 27 were escort ships. At the time of their recall, all of these ships were assigned to Naval Reserve training and were operated on weekends—and during the annual two-week training cruise—by Selected Reserve crews.

Nine destroyers and 18 escort ships—one of which operated on the Great Lakes—were assigned to the Atlantic Fleet. The remaining four DDs and nine DEs joined the Pacific Fleet. Having fulfilled their mission, all were scheduled to be back at their original home ports by the time you read this.

Destroyer-type ships have played a major role in the training of Naval Reservists for a number of years. The establishment of the "Selected Reserve Forces," together with added emphasis on antisubmarine warfare training, served to point up the value of DDs and DEs.

These Reserve ASW-type ships soon became known as the ships with two crews. They were maintained on a year-round basis by a nucleus crew of active duty personnel. One weekend a month, the Reserve crew of civilian sailors reported on board and, once the members were trained, took over the ship. Every year the ship and its Reserve crew took part in active duty for training (ACDUTRA) cruises. Every other year, the Selected Reserve ship would spend its ACDUTRA taking part in Fleet readiness exercises, and would participate in a national competition. This time it was for real.

To speed up mobilization, each Reservist in the program was issued pre-cut orders to active duty. The Reservists had to live within commuting distance for weekend drills, and be able to report for active duty in a matter of hours—without reliance on public transportation.

Thus, when the international situation led to a partial mobilization, the Naval Reserve DDs and DEs

NEW FRIENDS — Crew of *USS McGinty* (DE 365) have party for small fry.

HOME AGAIN — Skipper of *USS Miller* (DD 535) has the conn as Reservists return to Boston harbor.

joined the Fleet with a satisfying minimum of fuss and feathers.

THE FOLLOWING EXAMPLES should give you a pretty good idea as to how "ready" were these DDs and DEs—many of which had been slated for mothballing—when the call-up order came.

- USS *Loeser* (DE 680), homeported at Yorktown, Va., was recommissioned on 2 Oct 1961, and her Reserve crew was ordered to active duty. At the time of commissioning, there were 100 officers and men in the Reserve crew. The DE was assigned to Escort Squadron Eight, with Newport, R. I., as her new home port.

The ship completed refresher training at Guantanamo Bay, Cuba, in November and then steamed to Newport for a routine period of maintenance and upkeep. In January 1962, she reported to Commander Antisubmarine Warfare Force, U. S. Atlantic Fleet, for operations.

Loeser, and her sister ship, USS *Coates* (DE 685), previously homeported in New Haven, Conn., were the first two ships of their type considered ready for operations by their type commander, the then COMDESLANT. Before the two ships sailed from Newport, they were inspected by RADM R. H. Speck, USN, COMDESLANT, and VADM E. B. Taylor, COMASWFORLANT.

- USS *Remey* (DD 688) is another good example. On 24 Oct 1961, her Selected Reserve crew of eight officers and 103 enlisted men were mobilized in New York. On 27 November, *Remey* sailed from Newport, R. I., for Portsmouth, England, reporting for duty as part of Task Group 83.3 on 8 December.

The task group left Portsmouth five days later for hunter-killer training exercises in the Bay of Biscay, with Royal Navy submarines. ASW training was coupled with routine exercises including refueling at sea, highline transfers, high speed maneuvering, and individual ship exercises.

Ten days later the task group arrived in Rotterdam, The Netherlands, for the Christmas holidays. The visit, linked with the People-to-People program, gave the sailors a chance to sample Dutch hospitality. New Year's Eve found the ship operating in the North Sea.

Early on the morning of 4 Jan 1962, the task group arrived at the mouth of the Elbe River and proceeded upriver to Hamburg, Germany. Fifty of *Remey's* USNR crewmen had an opportunity to visit East and West Berlin, view the "Wall," and get a firsthand idea why they were ordered to active duty.

Operating with *Remey* were USS *Miller* (DD 535), *Hunt* (DD 674), and *Robinson* (DD 562).

- USS *Kidd* (DD 661) and *McNair* (DD 679) were mobilized on 20 October at Philadelphia. Two months later, these ships were on station off the Dominican Republic, operating with other ships of the Fleet in patrolling Caribbean waters.

- USS *A. T. Harris* (DE 447), berthed at the Naval Reserve Training Center, Whitestone, N. Y., joined the Fleet on 2 October. The World War II DE steamed northward immediately, taking part in patrols and ASW drills. She stopped off at Quonset Point, R. I., for new equipment. The day after Thanksgiving, *Harris* and her crew were ordered south for more patrol duty and a course in sub-killing at the Gitmo naval base.

SELECTED RESERVE SHIPS on the west coast wasted no time in becoming operative, either. Escort Divisions 71 and 72 are good examples.

- USS *McGinty* (DE 365), *Edmonds* (DE 406), *Walton* (DE 361) and *Whitehurst* (DE 634) made up Escort Division 71; *Alvin C. Cockrell* (DE 366), *Charles E. Brannon* (DE 446), *Vammen* (DE 644) and *Marsh* (DE 699) added up to Escort Division 72. Together, they formed Escort Squadron Seven, and were assigned to Destroyer Flotilla Five for ASW operations. While on ACDU, the ships were homeported at Pearl Harbor.

Escort Division 71 made a four-month tour of the Far East, arriving in Subic Bay on 10 January. *Edmonds* and *Walton* began operations with the South Vietnam navy in the South China Sea, engaging in various training exercises.

McGinty and *Whitehurst* joined

DUTY — ADM H. P. Smith, CINCUSNAVEUR, inspects Reservists in Hamburg. *Rt:* NR crew of *Robinson* ends tour.

ON THE LINE — Reserve crew of USS *Tweedy* (DE 532) man lines while alongside USS *Enterprise* (CVAN 65).

the other two ships on 24 February, and the four DEs rotated visits to Hong Kong and upkeep periods in Subic Bay with operations in the South China Sea. The division steamed from Subic Bay on 29 April and arrived at Yokosuka, Japan, on 4 May. The ships split up for port visits: *McGinty* and *Whitehurst* visited their Japanese "sister cities" of Sapporo and Kobe. *Edmonds* and *Walton* visited Moji, on the island of Kyushu, during the Moji Port Festival in mid-May.

Shortly before the DEs sailed for Pearl Harbor on 28 May, RADM Clyde J. Van Arsdall, USN, COMDESFLOTONE, commended the Reservists, saying: "The performance of the officers and men has been an inspiration to all Naval Reservists, and has set a high standard for the Reserves of all services."

SOME OF THE Selected Reserve ships found their way to the Mediterranean. A case in point is USS *Wren* (DD 568). *Wren* made her home in Galveston, Tex., before the call-up. The ship was undergoing her annual overhaul in Norfolk, Va., when the Reserve crew was ordered to report. The 10 officers and 88 enlisted Reservists were flown to join their ship. Early in November, *Wren* was undergoing training at Gitmo. When the Santo Domingo disturbances took place, *Wren* was ordered to join the task unit patrolling that area. During the patrol, *Wren's* commanding officer, CDR Phillip C. Koelsch, USNR, of Houston, Tex., assumed command of the task unit. Ship and crew fulfilled all duties of a first line destroyer.

Upon completion of patrol duties, *Wren* returned to Gitmo for more training. The destroyer was then ordered to duty with the Sixth Fleet in the Mediterranean. Before the DD joined Task Force Sixty, she stopped at Rota, Spain, and won the commendation of Commander Naval Activities, Spain, for ". . . smartness, pride and ship's spirit. . . ."

As you read these lines, the Reserve ships and their Reserve crews are back on inactive duty once again. Celebrations are just about over, and ships and crews are settling down to their Reserve routine of drills and ACDUTRA.

Ships and men proved their readiness in the recent call-up—just as they did in World War II and the Korean conflict. If the call comes again, they'll be ready again.

JOINING UP — Naval Reserve DEs, USS *Marsh* (DE 699) and USS *Vammen* (DE 644), moor at Pearl and become units of Destroyer Flotilla Five.

SIDE BY SIDE—*USS Bryce Canyon* (AD 36) tends to her brood moored at Terminal Island, Long Beach, Calif.

Three Cheers for the AD

WHEN DESTROYER TYPES operate beyond the reach of yard facilities (which, many destroyermen can tell you, seems like most of the time), it's the AD (destroyer tender) that provides them with maintenance, repairs, and supplies. Destroyers may moor alongside the AD for on-the-spot attention, or dispatch boats for spare parts or advice.

The successful operation of a destroyer tender requires two crews, which during wartime may consist of 1000 or more men. One crew operates the ship, the other performs specialty jobs for destroyers which come to the AD for service.

It's not unusual for one AD to service as many as 18 destroyers in all those aspects of upkeep and repair which can be accomplished without placing a DD in drydock.

Destroyer tenders have as many as 30 repair and maintenance shops, each of which specializes in some aspect of keeping the destroyer family in good shape:

A sheetmetal shop performs repairs and fabrications peculiar to DD types.

A coppersmith shop repairs and renews piping and tubing.

Electric, oxyacetylene, and aluminum welding jobs are handled by a team of welding specialists.

The machinery division tools all kinds of metals.

The boiler shop rebricks and retubes boilers, condensers, and other heat-exchange equipment.

An optical shop fixes watches and clocks, gun and director telescopes, binoculars, navigational equipment, and range finders of destroyers.

Typewriter repair fixes not only typewriters, but mimeograph machines, calculators, and adding machines.

The electric shop repairs lighting and power equipment.

An instrument shop repairs, adjusts, and tests gyrocompasses, dead-reckoning tracers, shaft revolution indicators, and announcing systems.

Electronics handles radio, radar, loran, and other electronic equipment.

Lithographic and print cranks out forms and directives.

Ordnance repairs guns, mounts, and associated hydraulic equipment.

The torpedo shop can fix 'em.

The deck department, with the aid of booms of 10- to 30-ton capacity, can easily lift a radar antenna from the DD's mast or transfer a

DDs OF Division 92 moor to tender.

Force

5-inch gun mount. (The tops of most DD stacks just reach the level of the AD's weather deck.)

Tenders also provide liberty boats and crews for DDs alongside when the nest is in the stream.

More than 100,000 items—everything from sewing needles to spare anchors—are kept in supply for distribution to destroyers.

Tenders provide the destroyer force with water, power, light, and compressed air.

An AD can evaporate sea water at the rate of 40,000 gallons a day.

The AD's extensive medical and dental facilities make it unnecessary, in many cases, to transport sick destroyermen to hospitals ashore.

Tenders provide mail, educational, and religious services for the men serving in smaller ships of the Fleet.

The tender's library contains 3000 books.

Thousands of training films and slides are available to the destroyer force through the AD's educational services division.

The AD's long, long soda fountain bar has been well elbowed by visiting destroyermen.

Sometimes the AD galley crew whips up enough chow to feed the entire crew of a DD alongside for repairs.

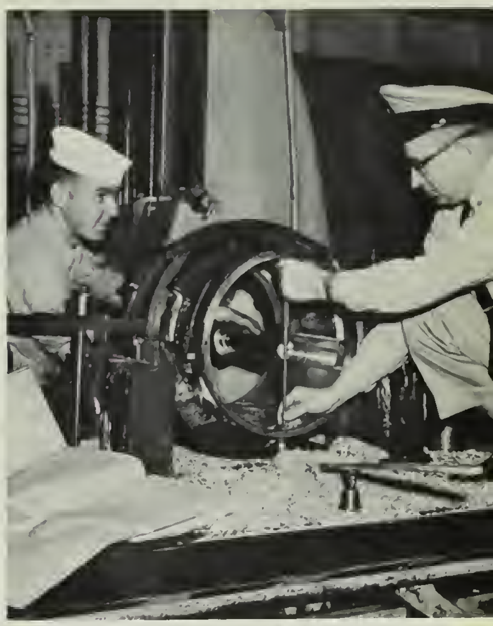
TODAY'S AD FORCE is comprised of 15 tenders which were built before or during World War II.

The *Dixie*-class ADs—530 feet in length and 18,000 tons full load displacement—are the largest. In addition to USS *Dixie* (AD 14), ships of the class are *Prairie* (AD 15), *Piedmont* (AD 17), *Sierra* (AD 18) and *Yosemite* (AD 19). *Dixie* and *Prairie* were commissioned in 1940, the others in 1944.

USS *Cascade* (AD 16), commissioned in 1943, displaces 16,650 tons (full load) and measures 492 feet in length.

Hamul (AD 20) was commissioned in 1941 and put in mothballs in recent months. *Hamul* is 492 feet in length and displaces 14,310 tons (full load).

The *Arcadia*-class consists of USS *Arcadia* (AD 23), *Everglades* (AD 24) and *Frontier* (AD 25), while the six-ship *Shenandoah*-class includes USS *Shenandoah* (AD 26), *Bryce Canyon* (AD 36), *Tidewater* (AD 31), *Yellowstone* (AD 27), *Grand Canyon* (AD 28) and *Isle Royale* (AD 29). Both the *Arcadia*- and *Shenandoah*-class ships are 492 feet long. The full load displacement of *Arcadia*-class ADs is 14,210 tons, while *Shenandoah*-class ships with the same length have a full load displacement of approximately 14,700 tons.



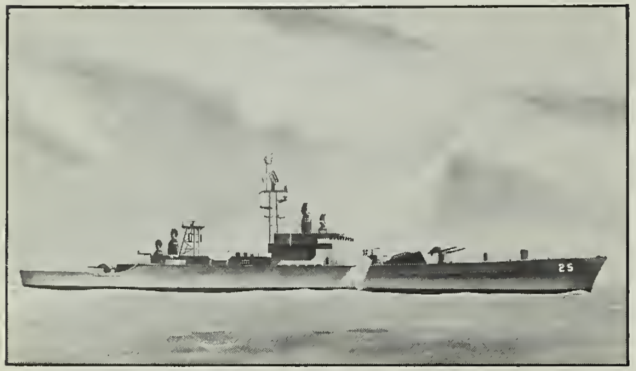
SHOP WORK — Men of the heavy machine shop on board destroyer tender add the final touches to a part turned out for a destroyer.

Although much older than many of the ships they service, the ADs are kept up-to-date. *Shenandoah*, for example, is fitted with *Asroc* (antisubmarine rocket) and DASH (drone antisubmarine helicopter) repair shops, and a helicopter launching platform. Their crews are equally up-to-date.

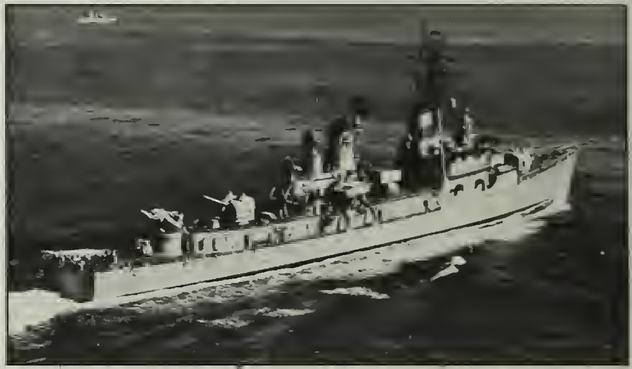
Dixie and *Yosemite* have undergone FRAM II conversions, taking on helicopter platforms and hangars, facilities for servicing DASH drones and storing homing torpedoes, and bays for servicing guided missiles.

GREYHOUNDS of the Seventh Fleet rest alongside USS *Prairie* (AD 15).

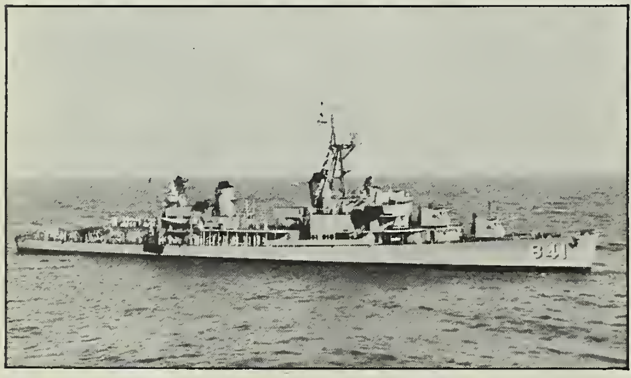
Your Destroy



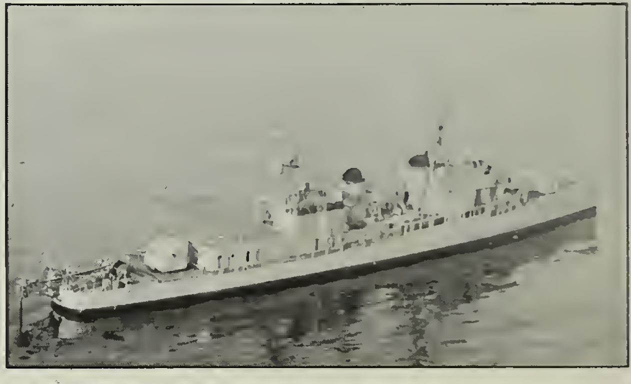
NUCLEAR-POWERED GUIDED MISSILE FRIGATE (DLGN)—*USS Bainbridge* (DLGN 25), shown in artist's conception, is scheduled for commissioning this month. The first nuclear-powered ship of the destroyer type, *Bainbridge* will have a range of up to 150,000 miles and can cruise for a long period without refueling.



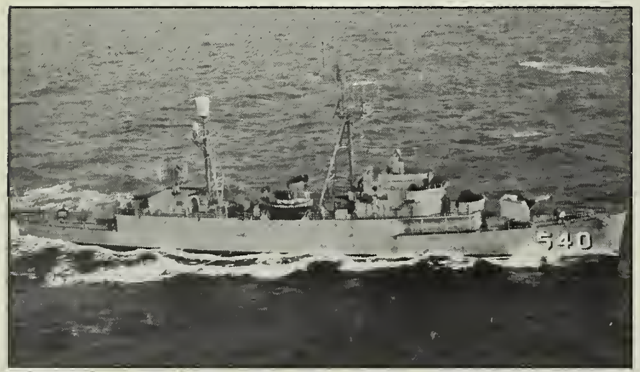
GUIDED MISSILE DESTROYER (DDG)—DDGs can be used in offense or to defend against supersonic aircraft or modern submarines. DDGs have a new longer hull design which evolved from the *USS Forrest Sherman* (DD 931) class. *USS Henry B. Wilson* (DDG 7) is pictured with *Asroc* launcher and Tartar missiles.



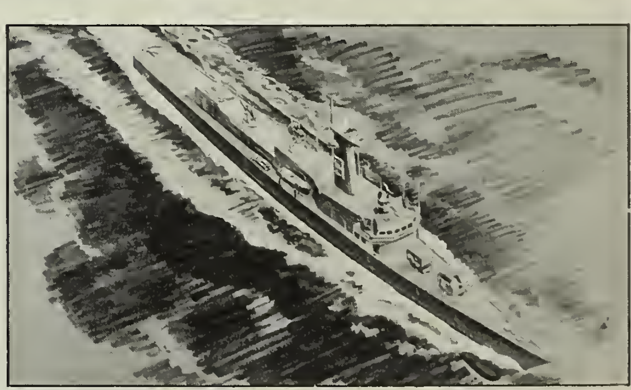
DESTROYER (DD)—These speedy and maneuverable little ships are Jacks-of-all-trades. Equipped to provide defense against submarine, surface or air attack, DDs also act as screens, plane guards, fire-fighters, transports, scout and rescue ships. *USS Noa* (DD 841) is pictured here after recovering LTCOL John Glenn's capsule.



FRAMMED (DD)—FRAM (Fleet Rehabilitation and Modernization) has changed the looks of many of today's DDs, DDRs and DDEs. *USS John W. Thomason* (DD 760) boasts a new aluminum deck house, bridge, new type aftermost, latest electronic equipment, DASH facilities and better living as a result of FRAM.

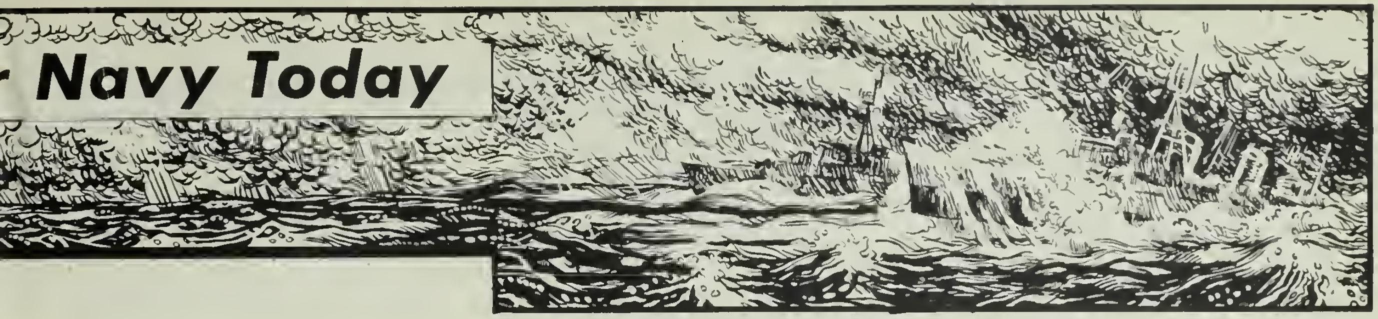


RADAR PICKET ESCORT SHIP (DER)—DERs are patrol ships rigged to detect enemy action at sea or in the air. New equipment includes air-search, height-finder and surface-search radar. *USS Vandivier* (DER 540) of the *John C. Butler* class appears here. Former DEs, DERs approximate the frigate category in other navies.



GUIDED MISSILE ESCORT SHIP (DEG)—(Under Construction) Requested in the fiscal '62 shipbuilding program, DEGs will be the first ships of the destroyer escort type designed to carry guided missiles. DEGs will be fitted with modified *Tartar* missiles, integral bow-mounted sonar, DASH, *Asroc*, and a 5-inch/38 gun.

Prepared by All Hands Magazine



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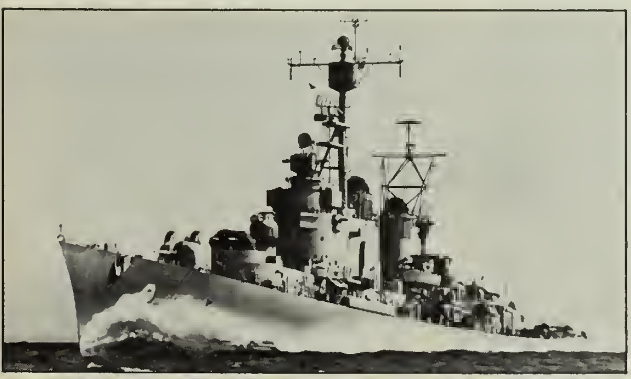
ESCORT SHIP (DE) (Formerly escort vessel)—DEs are especially designed for optimum performance in locating and destroying submarines. Shown here is *USS Cromwell* (DE 1014) of the *Dealey* class, designed for fast convoy work and boasting lavish electronic gear. There are nine classes of DEs in today's Navy.

RADAR PICKET DESTROYER (DDR)—DDRs are fitted with early warning radar to serve as long-range pickets against enemy aircraft. Same employ variable depth sonar for use against enemy submarines. Radar gear is seen here on *USS Frank Knox* (DDR 742) of the converted *Gearing* class (formerly DD 710 class).

DESTROYER (DD)—One of our mast recently produced DDs, *USS Parsons* (DD 949) (*Forrest Sherman* class) shown here, was completed in October 1959. First US warships with more firepower aft than forward, these 418-foat ships have increased freeboard forward, are air-conditioned and have aluminum superstructures.

ANTISUBMARINE DESTROYER (DD, formerly DDE) DD-type ships were converted to serve os convoy support escorts with both long and short-ronge submarine interception obility. The designotion DDE was discontinued as of 30 Jun 1962, with antisubmarine destroyers reverting to the DD classification.



FRIGATE (DL) (Formerly destroyer leader)—Serving as destroyer squadron flagships, DLs are designed ta engage in hunter-killer operations. *USS Mitscher* (naw DL 2, formerly DD 927) shown here, has a cleared stern for helicopters. DL's of the *Mitscher* class are the largest destroyers in the United States Navy.

GUIDED MISSILE FRIGATE (DLG)—Designed as guided missile ships of the destroyer leader or large frigate class, DLGs are antiaircraft and antisubmarine warships, DLGs may screen high-speed task forces, suppart amphibious operatians or operate independently. *Terrier* missiles are seen here on *USS Dewey* (DLG 14).

Greyhounds: Little Bark,

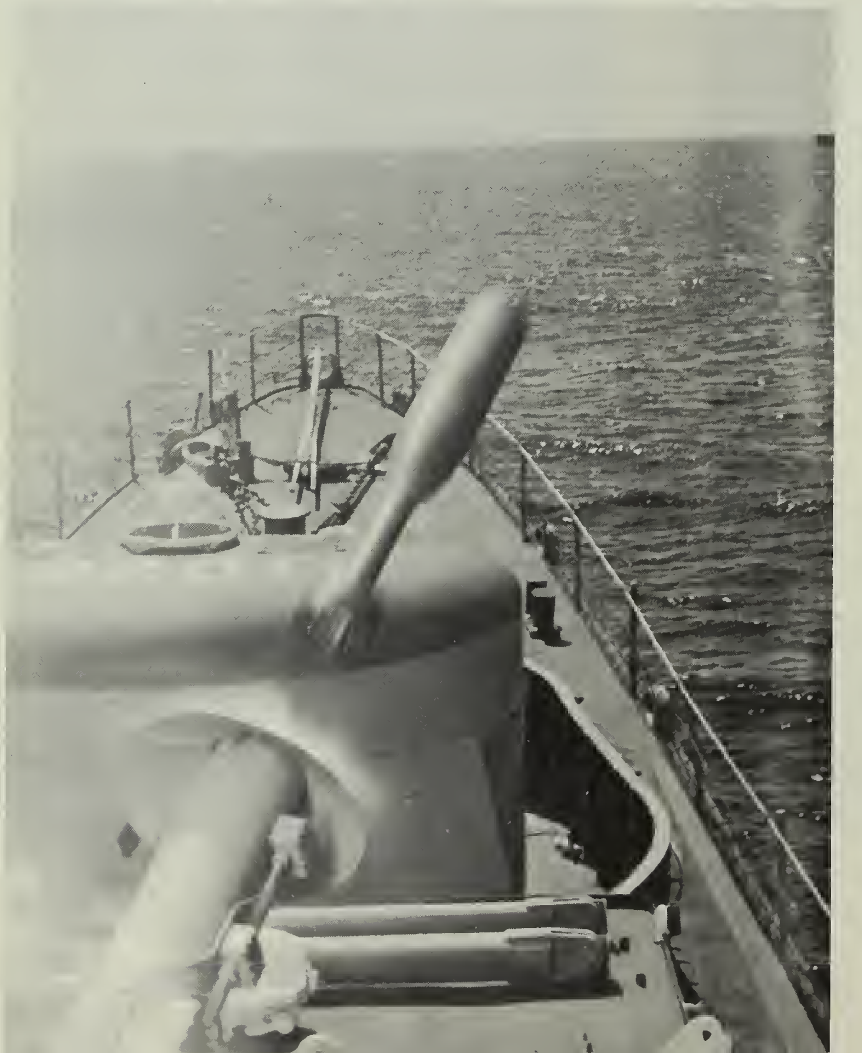
DESTROYERMEN feel that, pound for pound, destroyers are the toughest, scrappingest ships afloat today. You may not agree—especially if you're not a destroyerman. You'll have to admit, however, that the destroyer's willingness, and ability, to take on just about anything that flies, floats or swims has earned it a justly deserved reputation as the workhorse of the Fleet.

There are reasons, of course, why destroyer-types enjoy a reputation as the Fleet's all-purpose ships. First of all, there is the confidence born of solid accomplishment. Throughout the 60 years of their history they have seldom basked in the luxury of having only a single job to do—and they have done all their jobs well. Which brings up a second reason. To perform all their various functions, these small dogs with the big bite carry just about as varied and potent an assemblage of fighting power as you'll find anywhere.

IT WASN'T ALWAYS this way. Time was when destroyers were pretty much in the pop-gun league when compared with, say, battleships and cruisers. For a good share of their first 50 years, as a matter of fact, destroyers went up against any foe—large or small—with just three basic weapons at their disposal. They were the weapons of their time—deck and antiaircraft guns, depth charges and torpedoes.

They were good weapons, mind you, and they were refined and improved over the years. Still and all, many's the old-time destroyer skipper who felt the frustration of watching a marauding enemy submarine slip from his grasp because—let's face it—those World War II-style ashcan depth charges were hit-or-miss propositions at best. It's a sad but true fact, too, that WW II and earlier torpedoes fell somewhat short of perfect reliability in their performance. And gun crews, no matter how skillful (U. S. Navy gun crews of WW II vintage, destroyer and otherwise, were widely acknowledged to be the world's best), still had many limitations to contend with in an encounter with hostile aircraft.

SUB KILLER — Weapon *Alfa* is fired from *USS Van Voorhis* (DE 1028).



ASROC, DASH, TARTAR, TERRIER and some other related items have changed all that.

Big plus added to destroyers by their modern arsenals is range. No longer must most destroyer-types close with an underseas or airborne enemy and grapple with him at close quarters. The factors of early detection capability and quick-kill power at long range have moved many of today's destroyers into the capital ship class.

Progress, of course, has not been an entirely unmixed blessing to our destroyer forces. It has also produced vastly increased threats.

There are, for example, twice-the-speed-of-sound jet aircraft, and several varieties of missiles. We've got them—and so do some potential enemies. Increasingly, however, today's emphasis as far as most destroyer types are concerned has shifted more and more towards efforts at combating the menace of the atomic submarine. We're very happy to have been first to produce this submarine, but we've got to face the fact that we will very probably be staring down the same sort of gun barrel before too much more time has passed.

Fortunately, destroyers are singularly well-suited to do the antisubmarine warfare job (see page 24). And they've got some powerful hole cards to throw into the game.

TAKE *Asroc*—the current star of the show, most destroyermen will tell you. DDGs, DLGs, DLs, and many of the old DDs which have received the FRAM Mark I modernization treatment now carry this potent submarine killer.

Asroc is carried in an eight-round,

Big Bite

deck-mounted launcher. Its rear portion is a solid-fuel rocket motor, while its front-section payload can be either a conventional homing torpedo or a nuclear depth charge, depending upon the needs of the moment.

Asroc's exact range is classified, but it is long—in the thousands of yards category. Here's how it works.

The entire *Asroc* weapons system consists of an underwater sonar detection device, an electronic digital fire-control computer, the launcher and the missile. Within a matter of seconds after sonar detection of a submarine occurs, the computer charts the target's course, range and speed, and the launcher automatically turns into firing position. Then the ship commander selects the missile with the most appropriate payload, and fires it. The aluminum airframe which connects the rocket motor and the payload consists of two longitudinal sections, hinged to open up. In flight, after the rocket motor has burned for a predetermined time, a steel band holding the airframe together is severed by a small explosive charge, allowing the airframe to fall away, and leaving the payload to continue on its way.

Once an *Asroc* torpedo enters the water in the target area, it is activated by the energizing of a seawater battery, and commences an acoustical homing search, from which it locks onto its target. If the payload is a depth charge, it detonates with a large effective kill area.

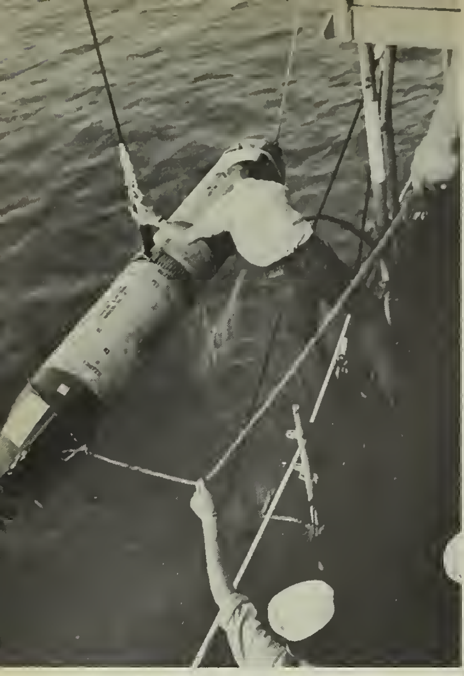
MISSILES TOO — *Terrier* blasts from stern launcher of *USS Gyatt* (DDG 1).

THEN THERE IS *Weapon Alfa*, a potent, variable-range antisubmarine rocket. It is gradually being phased out now; but is still operational on some DDs, the DL1 and DL2 class, and 1006/1021 class DEs.

Equipped with a conventional explosive charge, *Weapon Alfa*—it used to be known as *Weapon Able* before the Navy phonetic alphabet changed in 1955—is fired from a launcher which resembles a gun turret, and which is aimed automatically at the target by a special fire-control system.

Weapon Alfa's launcher can rotate almost a full 360 degrees, and the launching ship can fire it in an approximate arc of 200 degrees just as

RINGERS — *Hedgehogs* form pattern between DDs during ASW exercises. Above: Missilemen check *Tartar* system.



PRACTICE torpedo is brought back aboard destroyer following training exercise on high seas.

soon as an enemy sub is detected. Unlike *Asroc,* it has no rocket motor, but is fired directly at its target. Upon entering the water it sinks rapidly, and is lethal over a much wider area than old-style depth charges.

SCHEDULED TO BEGIN HITTING the Fleet just about the time you're reading this article (late this summer or early this fall) is DASH, an exciting new Naval weapons system.

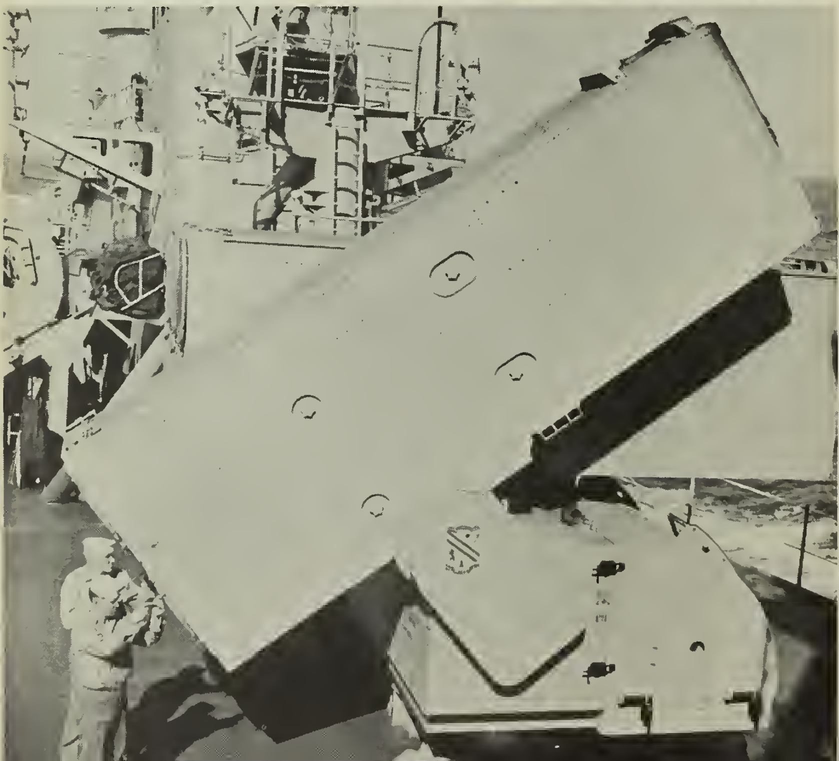
DASH—it stands for Drone Antisubmarine Helicopter—is a remotely controlled, unmanned whirlybird which can be guided and operated either from within the CIC or by an operator manning a control box out on deck.

The entire system consists of the drone copter, its hangar, a flight deck, the control equipment, and the payload—either a conventional homing torpedo or a nuclear depth charge.

Upon sonar detection of a prowling enemy sub, DASH would be quickly launched and remotely guided to the enemy submarine's general position—possibly as much as several miles from the launching ship. Once there it would be commanded to drop its torpedo or depth charge.

It is the fond dream of antisubmarine warfare experts to attain sure-kill capability while the enemy sub is still a long way off, and *before* it can fire its missiles and/or torpedoes. DASH should help bring that day much closer. It is installed on most of the destroyer-types which have received or are receiving both the FRAM I and FRAM II overhaul. You'll hear more about DASH soon.

Completing the Navy's antisubmarine warfare weapons line-up are *hedgehogs,* several different varieties of tube-fired *torpedoes,* and *depth charges,* well known to the Fleet.



LONG ARM — ASROC system has extended the range of DD killing power.

Hedgehogs are the mortar-like depth charges which are fired from a rack, normally 24 or 48 at a time, in roughly circular patterns. They explode only on contact, and their combined bursts produce a shotgun-like effect on a submarine inside the circle. FRAMmed and un-FRAMmed DDs, WWII DEs, and DDRs carry hedgehogs, as well as *Lloyd Thomas* class DDs, which have a trainable model.

While *Asroc,* DASH, etc., are beefing up the destroyer force's antisubmarine punch, *Tartar* and *Terrier,* installed on DDGs and DLGs, respectively, are doing the same for its antiair capabilities.

Tartar and *Terrier* are both solid-fuel, supersonic, surface-to-air missiles, but they differ in two major respects. *Tartar* employs a homing guidance system, while *Terrier* can be steered by either a homing or beam-riding system. *Tartar* is a single-stage weapon, while *Terrier* is a two-stage vehicle, which separates in flight.

TARTAR IS LAUNCHED at rapid intervals from either a single or dual rail launcher which also serves as a ready service magazine. DDGs 2-14 carry the dual rail launcher, while DDGs 15-24 will be equipped with the single rail type. Target tracking is accomplished by radar mounted on a trainable guided missile director. An electromechanical computer provides launcher orders, missile prelaunch orders, and tactical evaluation data for use in weapons control.

A weapons direction system makes possible the manual tracking of hostile targets; contains the necessary displays to permit operator evaluation of target threat, and the assignment of directors to combat the most immediately threatening of any of several possible targets. In addition, it assists the operator in making launcher assignment, missile selection, and ultimate firing of the missile salvo.

Still quite young as guided missiles go, *Tartar* was ordered into pilot production in March 1958. First pilot models went to sea for testing aboard the guided missile ship USS *Norton Sound* (AVM 1) before full production began in late 1960.

TERRIER, on the other hand, has been around since the mid-50's—

long enough to have spawned a second-generation successor, the advanced *Terrier*. *Terrier* is now carried by ships in the DLG 6 class, while the new, improved version will be installed on the DLG 16 and DLG 26 classes, and on the nuclear-powered USS *Bainbridge* (DLGN 25).

Terrier is launched and accelerated to flight speed by a single-stage booster which separates automatically from the missile at the end of the boost phase. Propulsion for the remainder of the flight is provided by a single-stage, low-thrust sustainer. Two *Terriers* can be launched at rapid intervals from a dual-rail launching system.

Like *Tartar*, *Terrier* target tracking and missile guidance are accomplished by radar mounted on a trainable director. A computer provides launcher position orders, missile prefiring orders, present and future target position, and time-to-fire information. A weapons direction system contains necessary display and controls to permit evaluation of target threat, assignment of priorities to targets, assignment of directors to targets, selection of the number of missiles to be fired, and the ultimate firing of the salvo.

(In the case of both missiles, test equipment installed aboard provides fully automatic test and checkout capability to insure that missiles are flight-ready, and also to insure compatibility between missiles and the ship's fire control system. Weapon control system alignment is possible with a high degree of reliability without firing. Computers, radar and weapons direction equipment all contain rapid, automatic, built-in checkout gear capable of testing the entire system without breaking electronic silence.)

Exact range of both *Terrier* and *Tartar* is, of course, classified. We will merely note that both are designed to engage, and destroy, high performance aircraft.

DECK AND ANTIAIRCRAFT GUNS installed in destroyer-types come in a variety of shapes, sizes and firepower. There are 5-inch/54; 3-inch/70; 3-inch/50; 5-inch/38; and 40 mm. The lineup (roughly) goes something like this:

- 5-inch/54—DLG 9 and 26 classes, DDG 2 and 15 classes, DL 2 class, and DD 931/45 class.
- 3-inch/70—DL 1 and 2 classes, and DD 825 and 827.
- 3-inch/50—DLGN, DLG 9, 16 and 26 classes, DD 931/45, DDR 742 class, DD 445 class, some DD 692 and 710 (unFRAMmed), DE 1006/21, 1033, 99, 152, and 198 classes, and DERs.
- 5-inch/38—DD 448, 692 and 710 (FRAMmed and unFRAMmed), DD (except for 825 and 827), DDR, and DE 224 and 339 classes.
- 40mm—DE 99, 198, 224 and 339 classes, some DD 692 class, and DD 764 class.

Number, type and location of mounts, and total number of guns aboard vary widely from ship to ship. In addition, conversions, modernizations, and changes to new construction are altering the picture even more from day to day.

One point you should keep in mind. DASH, *Asroc*, *Tartar*, *Terrier* and the rest are only as good as radar, sonar and the intricate electronic fire control and related equipment make them. And this gear, in turn, is only as good as the men who operate, evaluate and maintain it.

In a very real sense, then, men, machines and equipment are all integral parts of every destroyer's overall weapons system. And you can bet your next paycheck that the destroyer forces, as they have always done, will continue to put all of this fighting power to good use.

—Jerry McConnell, JO1, USN.

CHANGING SCENE—There is a potent assortment of weapons on DD types.

HEDGEHOGS, mortar-like depth charges aboard un-FRAMMED DDs and DEs.

Guided Missile Destroyer

USS TOWERS (DDG 9) is the Navy's newest and most modernly equipped guided missile destroyer.

Shortly before leaving for the Southwestern Pacific, to serve as flagship of Fleet units attending Australia's Battle of the Coral Sea celebration, *Towers* completed her underway training and pre-deployment weapons trials by launching four *Tartar* anti-air missiles into the Pacific Missile Range's sea test range.

The launchings were conducted near Anacapa Island, about 10 miles offshore, following air tracking exercises near San Nicholas Island.

The firings were at Q-2C jet aerial targets launched from a Utility Squadron Three aircraft. The Pacific Missile Range assisted in missile and target tracking and evaluation of telemetered information.

Towers is also equipped with antisubmarine rockets (ASROC) and the latest antisubmarine warfare torpedoes, as well as conventional five-inch guns.

Now ready to support fast carrier task groups and operate independently, the ship conducted the missile exercises under the operational control of the Commander, Training Command, U.S. Pacific Fleet.

The *Towers* first arrived at the Naval Ammunition Depot at Seal Beach to load missiles, as a beginning to several days of preparation necessary aboard ship to get ready for her training exercises and weapons trials.

Prior to launching, each missile was thoroughly checked to be sure it was ready for flight, and the ship's complicated launching system underwent a series of tests.

The *Towers Tartar* system is composed of missile radars, weapons direction equipment, directors, computers, launchers, missile and telemetry check-out circuits, and, finally, the "bird" itself.

Each of these system components was checked independently and again as a unit. Insuring that they perform satisfactorily is the job of a team of highly competent electronic technicians, fire controlmen, missile technicians, and gunner's mates.

Since some of the missiles launched were telemetry runs, missile technicians gingerly removed warheads and inserted telemetering packages.

HOME ON THE RANGE — Telemetry unit is inserted into *Tartar* missile.

Next came the missile systems tests, the static checking of each *Tartar* to insure its suitability for flight. Simulated in-flight situations were fed into the "bird" for response checks.

Simultaneously, radars were aligned, computers and guidance controls checked, and tests were made of all segments of the system, both separately and then, together.

On the day of the missile firings, the ship went to general quarters and the special countdown procedure began for the firing runs. Announcements over the ship's public address system reported progress:

"All hands clear areas of the ship aft of frame 125."

"T-20 and counting."

"The radar has acquired the target."

"T-2 and counting."

"20 seconds; 10 seconds; five seconds; four, three, two, one, FIRE!"

With a roar, and trailing a white-hot exhaust, each *Tartar* streaked from the launcher while all aboard awaited word from the Combat Information Center:

"Target intercepted!"

After the last missile was launched and following an assist in recovering the Q-2C target, the ship's commanding officer, Commander Lawrence D. Cummins, passed a word of thanks to PMR and headed *Towers* for her home port, San Diego.

Towers is the fourth ship of the *Charles F. Adams* class of guided missile destroyers, the newest and largest destroyers in the Fleet.

The ship was commissioned in June 1961 at the Puget Sound Naval Shipyard, Bremerton, Washington, and named for the late Admiral John H. Towers, the Navy's third Naval Aviator.

Her over-all length of 437 feet and 47-foot beam give a full load displacement of 4500 tons, twice as heavy as a typical World War II destroyer.

Four boilers produce approximately 70,000 shaft horsepower, giving the ship a speed in excess of 30 knots.

Use of aluminum for the superstructure permits greater flexibility of design and provides the necessary balance for new and heavier weapons which use the all-welded high-strength steel hull for a platform.

Towers' primary armament for anti-air warfare is her twin-missile launcher, firing *Tartar* surface-to-air-missiles, capable of engaging targets at supersonic speeds. The primary antisubmarine weapon carried is the *Asroc*, which fires ASW rockets equipped with either homing torpedoes or depth-charge heads.

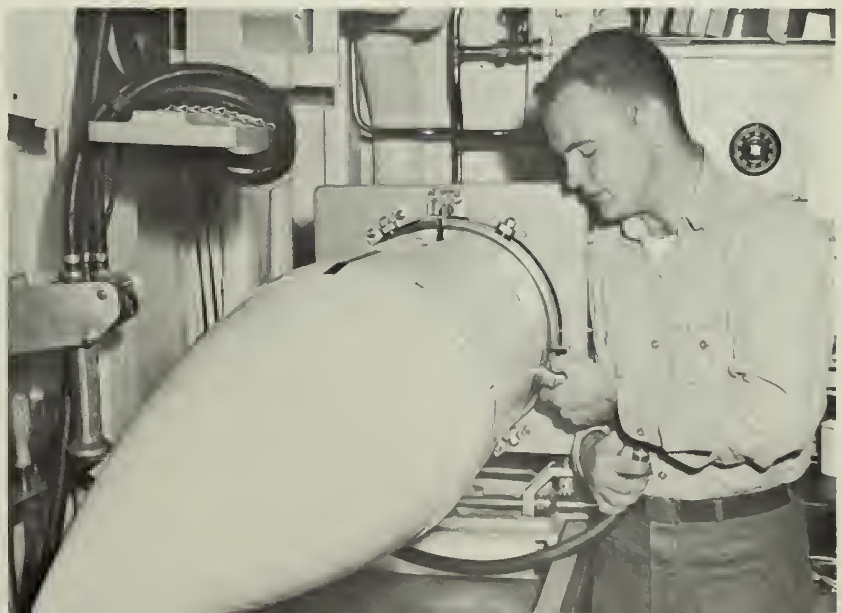
In addition *Towers* carries two 5-in/54 caliber dual purpose rapid fire guns, and two ASW torpedo launchers.

This firepower is controlled by intricate electronic systems coupled with radar and sonar detection and tracking equipment. The ship is designed for a wartime complement of 354 officers and men.

Towers is assigned to the Cruiser-Destroyer Force, U. S. Pacific Fleet, as a unit of Destroyer Squadron 15.

— Dan Tikalsky, JOCS, USN.

MISSILEMEN ready *Tartar* system for shot down Pacific Missile Range.



NOSE CONE is carefully checked out for test firing from USS *Towers*.

FAST SHIP—USS *King* (DLG 10) is a speedy ship armed with the latest in weapons and detection gear.

King of the Frigates

"Give me a fast ship for I intend to go in harm's way."—John Paul Jones.

If John Paul Jones were still around today, he would be well pleased with the 30-knot-plus USS *King* (DLG 10).

Named for the late Fleet Admiral Ernest J. King, USN, the guided missile frigate is a unit of Destroyer Squadron 15, homeported at San Diego, Calif., and serving as flagship of Cruiser-Destroyer Flotilla Three.

The ship is designed to provide task forces with antiair protection, radar picket and antisubmarine capabilities. She is equipped with the latest in air search and fire control radar, sonar and antiaircraft and antisubmarine missiles.

Fully loaded, *King* displaces 5600 tons and, with her high-pressure steam turbines, is capable of speeds that would have delighted old John Paul. The ship is approximately 512 feet long and has a beam of 52 feet. Living spaces for her 22 officers and 350 enlisted men are the ultimate in comfort and convenience. All living and working spaces are air-conditioned and there are other habitability features unheard of in Jones' day.

Each man has a Pullman-type bunk equipped with reading lamp, two lockers and a foam-rubber mattress. There is an individual air vent at each bunk which allows its occupant to keep the flow of cool air at just the right level for his personal comfort. This feature draws all sorts of praise when the ship is steaming in tropical waters. Adding to the ship's smart appearance are the beautifully tiled decks, which harmonize with the colors used on the bulk-

FOR A SHARP CREW—A. Gallegoes, SHSN, unloads washer and L. Hall, SH1, checks work in ship's laundry.

WORK AND PLAY — R. A. Spence, SFMFA, bends metal in machine shop. *Rt:* H. A. Jones, EN2, uses hobby shop.

heads throughout the interior of the ship.

In addition, with two lockers available for each man, the *King* sailor has more than ample space for stowing his uniforms and personal gear.

Another essential, figuring in the high morale of the men of *King*, is the food. Ask any sailor on board what he thinks on this subject, and it's pretty certain his reply would be a favorable one. As one Navyman puts it, "I've been in many ships in my time, but this one tops them all for the quality of meals that the galley turns out."

"There's teamwork between the cooks and bakers," agrees another. "Their pride in their work certainly makes for some mighty tasty meals."

Leadership is something else found in *King*, and it shows right from the skipper on down to the junior petty officers. There's teamwork among the men, with gratifying results. Those results are evident when rates are "handed out" every six months following the service-wide examinations for advancement.

Lectures and showings of training films are frequent aboard the missile frigate, and safety hazards aboard ship are stressed in each plan of the day. In addition, bulletin boards throughout the ship display photographs emphasizing the importance of traffic safety.

Fleet Admiral King, who was born in Lorain, Ohio on 23 Nov 1878, served as Commander in Chief of the U. S. Fleet and Chief of Naval Operations during World War II. A 1901 Naval Academy graduate, he died at Portsmouth, N. H., on 25 Jun 1956.

A four-and-a-half million dollar high school was recently dedicated in Lorain in memory of FADM King who, when he graduated from Lorain High School in 1897, was valedictorian. With a 2000-student capacity, the new school and its grounds occupy 31 acres.

The *King* story is similar to that of many of our ships today—she's a fast ship with an enthusiastic crew. And it's a pretty sure bet that if the need should arise to sail in "harm's way," uss *King* would be ready to go.

—George S. Cates, JO2, USN.

DLG STYLE — W. Brooks, CS2, prepares steaks for *King's* crew. *Rt: Terrier* is ship's big punch.

DD REPLENISHMENT—

Rigged

REPLENISHMENT AT SEA has become such a fine art that U.S. Navy ships can operate, theoretically, from major overhaul to major overhaul or drydock period without coming into port. We're referring, of course, to the ability of the mechanical ship, not the human type crew members.

Every item needed aboard ship today can be furnished or replaced by underway replenishment. Every day at sea, food, clothing, repair parts, fuel and personnel are transferred from one ship to another.

All these are important and necessary for the welfare of the ship and her crew. There is one item among these, however, that is needed every few days and for which there can be no substitute—fuel.

Until nuclear power is installed in all ships of the operating forces, refueling at sea will be among the most necessary operations accomplished. Today refueling at sea is done as a regular routine and is a part of every exercise. Ships of the U.S. Sixth and Seventh Fleets are good examples of ships that are sustained almost exclusively by underway replenishment.

The relative ease of a refueling at sea operation and the number of times it is done without incident don't remove the danger. When two or more ships are lashed together with a complex of wires and hoses, cruising along from 60 to 120 feet apart at

FILL 'ER UP — *USS Courtney* (DE 1021) and (below) *USS Forrest Sherman* (DD 931) move into position for fueling from *USS Kankakee* (AO 39).

CONTACT — Messenger carrying phone lines is passed to DE. *Rt:* Forward refueling station is rigged.

for a Refueling Record

10 to 15 knots, they are not only vulnerable to attack, but are in constant danger of collision.

To decrease the tied-together time and lessen the danger period during refueling at sea, speed during rigging and unrigging is necessary. Not reckless speed, but safe, efficient speed.

Many crews have become experts at refueling at sea. They can, on a clear day with smooth seas, come in fast and close, get the lines and hoses across and start receiving fuel in almost unbelievable times. Some of the times reported to ALL HANDS are so fast that we sometimes wonder how they can do it. These letters prompted us to investigate refueling at sea, and to find out for ourselves just what does happen when a ship tells us she has approached, rigged or unrigged in some short period.

TO DO THIS we visited USS *Kankakee* (AO 39) in the Atlantic while she was operating with a group of destroyer-type ships off Cape Hatteras. Captain M. O. Slater, USN, CO of *Kankakee*, explained a few of the finer points about refueling.

First of all there are three times to be considered while refueling at sea: Approach time; rigging time; and unrigging time.

The procedure starts with the delivery ship, USS *Kankakee*. When *Kankakee* is steady on course and speed, she hoists the signal flag Romeo at the dip on the side that is rigged for refueling. When she is ready for the ship to make the approach, the Romeo flag is two-blocked.

Basically the same thing also happens aboard the approach ship, let's say USS *Forrest Sherman* (DD 931). She too hoists the Romeo flag at the dip when she is ready to come alongside to be refueled. At this time she is trailing astern of *Kankakee* several hundred yards. When *Sherman's* bow is within 300 to 500 yards of the stern of *Kankakee*, and all is ready for refueling aboard, she two-blocks the Romeo flag and heads for *Kankakee*. Her approach time starts when the Romeo flag is two-blocked.

CAPT Slater is of the opinion that if there's any fudging to be done, as far as a record is concerned, here's the time to do it. Naturally, if the ship is trying for a record she wants to wait until her bow is exactly 300 yards astern of the oiler before she closes up the Romeo flag. "It is difficult to determine exactly when the approach ship is 300 yards astern," CAPT Slater said. "We take their word for it." He hinted that in trying to set or beat a record, the approach ship sometimes squeezes the 300-yard limit just a little before she two-blocks Romeo, "probably without meaning to."

THE APPROACH TIME ends and the rigging time begins when the first manila messenger—not a heaving line—is over. The rigging time ends when pumping has started. The period during the pumping isn't counted, of course, because it varies with the amount of fuel needed by that ship.

The third timed period is unrigging time. This time starts with the completion of delivery and ends when all lines are clear of the ship being refueled. The oiler keeps a record of all these times and so does the receiving ship, usually.

All these times sound quite simple to figure and you may wonder why there is any discussion about them at all. It begins to get a little more complicated, however, when the ships start breaking these times down, station by station. Approach time, of course, is always the same. The rigging time, if kept by each station, is from the time the first messenger is aboard at that station until pumping has started at that station. Unrigging time is figured the same way—from the time delivery has been completed at that station until all lines are free at that station. Over-all times would be as described earlier.

REFUELING AT SEA is a dangerous operation and there are many things to be considered. Here are just a few of the considerations:

- All rigs should be capable of being disconnected quickly and per-

OILY START — Men of USS Courtney man refueling station. Rt: Refueling rig to USS Forrest Sherman.

sonnel should be assigned specific responsibility for performing the disconnects if they should become necessary.

- All equipment that temporarily prevents watertight hatches from being closed or blocks important access ladders should also be capable of easy and quick removal and stowage.
- Members of the replenishment party should be stationed as close to their general quarters stations as posible.
- The formation of ships should be dispersed so that disastrous losses will not be sustained from the explosion of a single bomb. At the same time, ships must be stationed in a formation so that the refueling ships are given maximum protection from attack.

Conning the ship during refueling is not a simple matter of each ship holding steady on a prearranged course. Each ship normally carries a certain amount of rudder, and slight changes in speed and rudder are necessary.

Perhaps the most important element during refueling is communication between the delivering and receiving ship. The first messenger across carries the telephone lines and the last lines to be let go are the telephone lines. It is essential that pumping and maneuvering information be passed between the ships quickly A signalman also stands by at all times in case the telephone fails. In rare cases, usually only when there is an emergency, megaphones are used between the two ships during a refueling exercise.

GOOD EQUIPMENT is essential to a successful and speedy refueling at sea. The following items are commonly used in all types of replenishment operations.

- *Distance line*—This line is usually passed between the ships along with the telephone lines. It is one and one-half inch manila, 300 feet long, and carries, in daylight, colored cloth or painted canvas markers every 20 feet which tell the distance from the delivering ship. At night, red flashlights are used in place of colored markers. The distance line is secured to the fleet oiler and is held taut by men aboard the receiving ship. The CO of the receiving ship is, therefore, able to see at all times the distance between the ships.
- *Electric megaphones*—These are normally used only in an emergency. One may be used sometimes during the final stages of approach before the telephone lines are passed. Megaphones are not, however, usually used during a routine refueling.
- *Fenders*—These are the same fenders that are aboard every ship. While refueling, however, they are held over the side of the control ship, just in case the receiving ship gets a little chummy.
- *Line-throwing guns*—These have almost been relegated to emergency use today. They are always kept ready, but a bolo line is more commonly used. This is a nylon gun line with a weight at the end. The weighted end is swung over a man's head to gain momentum and then released. Because the line is small, a six- or nine-thread line is bent on for passing messengers and other lines.
- *Telephone*—This is the best means of communications between ships during refueling at sea. Other means are sometimes used, but none are as good as a telephone.

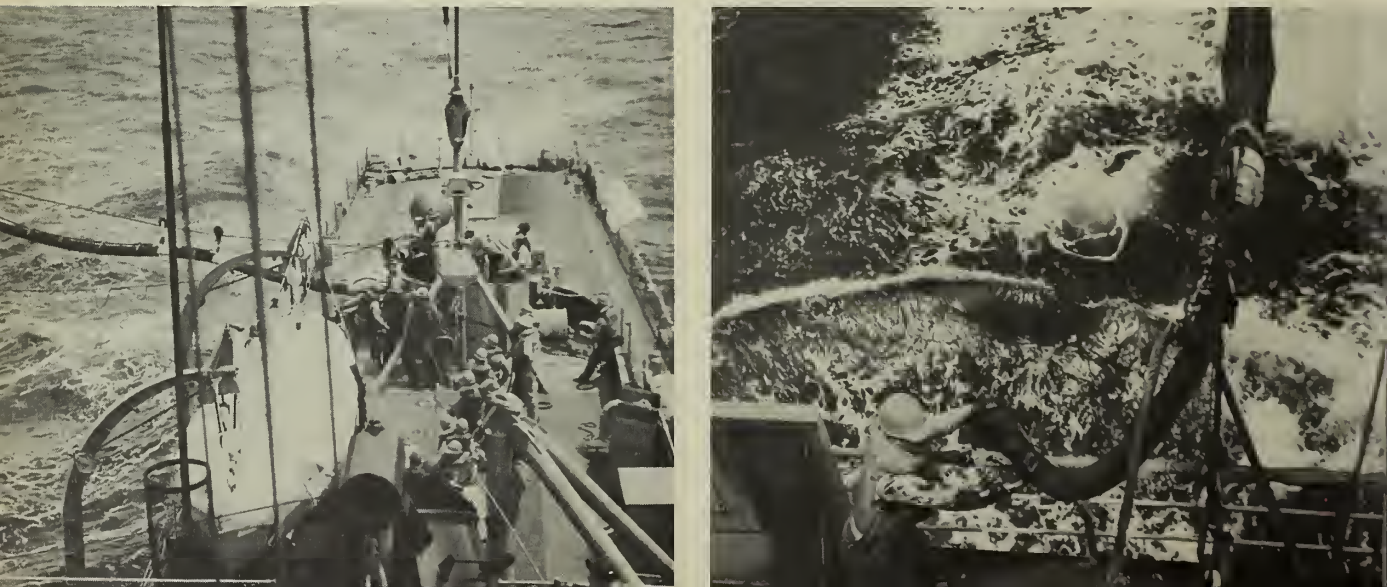
THERE IS CONSIDERABLE DANGER to a ship and her crew while refueling at sea. There is first of all the danger of collision, since the ships many times operate fewer than 100 feet apart while cruising at some 12 knots; then there is the danger of fire while passing fuel; of men falling overboard while working, in some cases, without lifelines; and finally, there is the danger of being attacked while in the rather awkward position of being refueled. Refueling at night makes even the routine parts of refueling dangerous.

The ships themselves must guard against collision and fire, while their sister ships in the operating group guard them from attack by an enemy and also watch for men who might fall overboard.

During an antisubmarine exercise, the ships surround the oiler and the refueling ships. The ships of the force then rotate in a clockwise direction to refuel, with the ship at 6 o'clock in this circle moving into lifeguard position and then into refueling position. As one ship is finished, she takes her place in the screen and a new ship comes alongside from a lifeguard position. The next ship to be refueled acts as lifeguard for the ship which precedes her to the oiler.

There is constant tension aboard a ship which is being refueled. There is not only the constant danger of attack or of fire, but also the danger

STERN VIEW — DE takes on fuel from USS *Kankakee*. *Rt:* Pigtail goes over the side after refueling of DE.



of a sudden roll which could part a line or snap a piece of equipment. No piece of equipment is so good that it will not break under certain circumstances. And if it does break, personnel could be seriously hurt.

There is more than one method of getting the fuel hose to the receiving ship. The method usually varies with the type of ship that is delivering the fuel. We will discuss only one—the span wire system. According to CAPT Slater, this is the system most commonly used in the U.S. Navy.

About the only other standard system is the close-in method.

The first step in the actual refueling process while using the span wire system (that is, after communication has been established) is to get the span wire across at each refueling station. This is done through a combination of lines as discussed earlier.

First there is the small gun line, then a small manila and then the span wire. When the cable is received on the ship to be refueled, it is secured to a tripod type arrangement which is secured to the deck of the receiving ship. The span wire is then pulled and held taut by the SAO. The receiving ship then pulls the six- or seven-inch fuel hose across on this span wire. The hose is carried by a pulley which rides on the span wire. When the hose is received on board a destroyer, a flexible piece of hose called a pigtail is inserted into the opening of the fuel tank and tied down. When this has been done the oiler begins to pump. From the time when the first piece of manila comes aboard the receiving ship until pumping has started is rig time.

Following rig time, if nothing breaks and all goes smoothly, it is a routine refueling session. The span wire is held taut by the oiler and more or less hose is played out to the receiving ship as the distance varies from maybe 60 feet to 120 feet or more. With the span wire system, a ship can be separated by several hundred feet if necessary.

Before the hose is removed from the tanks aboard the destroyer, the Fleet oiler first blows air through the hose and then applies suction to empty the fuel from the hoses. This saves the deck hands a little work when the refueling is over. Drippy hoses are not popular.

Then comes the unrigging. The hose is first of all sent back to the oiler and then the span wire is returned. After all other lines and hoses have been let go, the telephone lines are returned. When the last line is let go from the receiving ship, the unrigging time has ended.

The only thing left is the bill. The SO dispatches the ship and tells her just how much fuel was used to fill her tanks. The ships don't pay in cash, however; they use their credit cards.

Destroyers have small oil tanks and must be refueled more often than larger combatant types. For this reason, a carrier task force is not always limited by the cruising range of the carriers in the group, but by the cruising range of their escorting ships. To remedy this situation, aircraft carriers not only carry fuel for themselves, but also carry extra fuel for their escorts. Even between carriers and destroyers, the span wire method of delivery is the one most commonly used.

Refueling at sea methods have changed considerably since 1899. In the fall of that year, the collier, USS *Marcellus* installed a marine cableway on her deck and while being towed astern, transferred coal to USS *Massachusetts.*

Fourteen years later; still using the astern towing method, the Navy had increased its rate of coal delivery at sea four times over that attained in the 1899 trial. Since then the astern method has given way to the alongside method of replenishment. The time involved in delivering fuel and other supplies by the alongside method has been cut to a fraction of the time needed with the astern method.

U.S. Navy ships must still be capable of refueling by the astern method, however. If it were necessary to refuel from a merchant ship convoy, the astern method would probably be used. Also, some friendly foreign countries still use the astern method of refueling.

We don't claim this to be a record, but the fastest time for a destroyer rigging from an oiler that we know of was claimed by USS *Bigelow* (DD 942) while refueling from USS *Truckee* (AO 147). *Truckee* clocked *Bigelow's* rigging time as 83 seconds at the forward refueling station and 97 seconds at the after refueling station. That's mighty fast work.

—Erwin A. Sharp, JOC, USN.

THE END — Refueling hose is returned to Fleet oiler and (*rt.*) a "full" destroyer pulls away.

BOOKS

BOOKS ON DESTROYERS AND DESTROYER WARFARE

DESTROYERMEN will find many interesting accounts of destroyer history, development and fiction in their libraries. Destroyers are also featured in many general histories. Fletcher Pratt's **Compact History of the U. S. Navy,** Knox's **A History of the United States Navy,** Potter's **United States and World Sea Power,** and **History of United States Naval Operations in World War II,** edited by RADM Samuel Eliot Morison are good introductions. Books like Garnett Eskew's **Cradle of Ships** which describes the Bath Iron Works, a pioneer in destroyer design and construction, and **A Long Line of Ships,** by Arnold S. Lott, about the Mare Island Navy Yard activities will bring back memories to many old destroyer hands.

The larger libraries also have many excellent books on destroyers that are out of print. Ask your librarian about them. Listed below are books found in many ship and station libraries:

Historical

Tragedy at Honda, by Charles A. Lockwood and H. C. Adamson, 1960. Describes the grounding and loss of seven speeding U. S. destroyers on rocks off the coast of southern California in September 1923.

Destroyers, Key Ships of the Fleet, by Force Information Office, Destroyer Force, Atlantic Fleet, 1959.

Japanese Destroyer Captain, by Tameichi Hara, 1961. An account of great naval battles of the Pacific by a career Japanese officer.

Destroyer Squadron 23, by Ken Jones, 1959. Popularly written account of action by Arleigh Burke's destroyer squadron in South Pacific campaigns, with biographical material.

Three Corvettes, by Nicholas Monsarrat. True stories of convoy duty.

The Kelly, by Kenneth Poolman, 1955. The story of Lord Mountbatten's destroyer *HMS Kelly* before she was sunk off Crete in May 1941.

73 North, by Dudley Pope, 1958. A description of the successful defense of a convoy by a British flotilla against a superior German force headed by a pocket battleship.

UNDER FIRE — Enemy shore battery hits near DD during action off Korea.

Destroyer Man, by Anthony Pugsley, 1957. Describes British action in the Norwegian campaign, Malta convoy battles, Mediterranean operations and the Normandy landings.

United States Destroyer Operations in World War II, by Theodore Roscoe, 1953. A comprehensive book covering destroyer operations in all theaters of the war.

Fiercest Battle, by Ronald Seth, 1962. Tells the story of the North Atlantic Convoy ONS 5, and gives explanation of escort of convoys by destroyers and dramatic battles with U-boats.

With Ensigns Flying, by David Thomas, 1958. Describes British operations in World War II.

United States Naval Chronology, World War II, by Naval History Division, Chief of Naval Operations, U. S. Navy, 1955. Chronology for individual ship and group action, losses and victories.

Fiction

Jungle Seas, by Arthur A. Ageton, 1954. Action and romance in South Pacific from port to battle stations and convoy.

Good Shepherd, by Cecil S. Forester, 1955. Tells of 48 desperate hours during which Captain Krause of *Keeling* struggles to protect 37 merchantmen in a convoy with only four destroyers.

Delilah, by Marcus Goodrich, 1953. Story of a U. S. destroyer during the six months in the South Pacific before our entry into World War I.

Cruel Sea, by Nicholas Monsarrat, 1951. An excellent, realistic novel of men battling the enemy and the North Atlantic.

Enemy Below, by Denys A. Rayner, 1956. The story of a naval battle between a British destroyer and a German submarine in World War II.

Long Haul, by Denys A. Rayner, 1960. A suspense story of the successful towing of a Greek tanker by a British destroyer with U-boats in pursuit.

Hurricane, by Terence Robertson, 1960. The story of a destroyer caught in a hurricane and a horde of enemies during wartime.

A Departure From the Rules, by Anthony Robinson, 1960. A novel of the destroyer *Dobbs*.

The Enemy, by Wirt Williams, 1952. The tale of a four-stack destroyer, part of a team of three destroyers and a carrier which covered 20,000 miles hunting the enemy.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

Here Comes *Conyngham*

The 431 foot-long USS *Conyngham* (DDG 17) has been launched at Camden, N. J. She is the third destroyer to bear the name.

Conyngham was named for Captain Gustavus Conyngham, a former merchant ship captain who was commissioned in the the Continental Navy in 1777. He commanded *Surprise* and *Revenge* during the Revolution and took 60 British ships in 18 months.

At the end of the Revolution, he returned to the merchant service and commissioned the armed brig *Maria*. Later, he assisted in the defense of Philadelphia in the War of 1812.

The first USS *Conyngham* saw service during World War I, patrolling the Irish coast and escorting convoys through submarine-infested waters.

The second ship to bear the name was a World War II destroyer in the Pacific. During her patrols, escort service, bombardments and landing support, she collected 14 battle stars. She was decommissioned in 1946 and sunk during the Bikini nuclear tests in 1948.

The latest *Conyngham* displaces 3370 tons and is armed with *Tartar* missiles, *Asroc* and two 5-inch/54-caliber guns. She carries a complement of 24 officers and 330 enlisted men. She is scheduled for commissioning in July 1963.

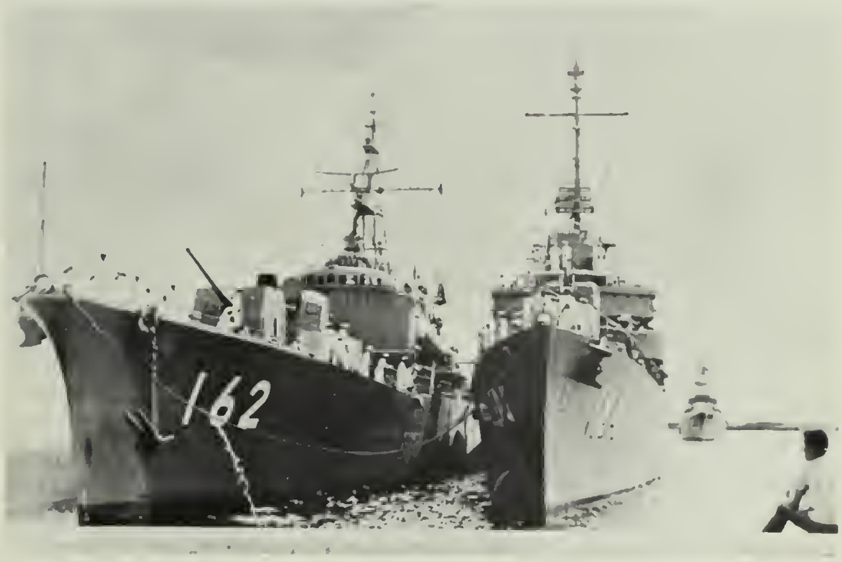
Biddle Commissioned

The 3370-ton guided missile destroyer USS *Biddle* (DDG 5) newest addition to the Navy's Atlantic Fleet Cruiser-Destroyer Force, was commissioned in early May at the Naval Base, Philadelphia, Pa.

Biddle is named in honor of Captain Nicholas Biddle, Continental Navy. A Philadelphian, CAPT Biddle was in command of the 32-gun frigate *Randolph* when she engaged the British 64-gun ship-of-the-line *Yarmouth* in battle on 7 Mar 1778.

Despite his huge disadvantage in armament, and the fact that he himself was so severely wounded early in the action that he was at first thought to be dead, CAPT Biddle heroically directed the fire of his ship throughout the brief but savage engagement. In fact, the British captain later reported CAPT Biddle's fire to have been not only accurate, but so rapid that *Randolph* had fired three broadsides to every one of his. After some 20 minutes, however, fire apparently penetrated *Randolph's* magazines, and she blew up. CAPT Biddle was lost, along with 311 of his 315-man crew.

The new guided missile destroyer was built at Camden, N.J., and carries a crew of about 350. Her armament includes the *Tartar* guided missile weapons system, *Asroc* (antisubmarine rockets), antisubmarine torpedoes and a five-inch/54 dual purpose gun battery.



JAPANESE destroyers *Teruzuki* (DD 162) and *Yugure* (DD 184), once a U.S. Navy destroyer, moor in Apra Harbor, Guam, for two-day visit.

Japanese DDs Visit Guam

Four Japanese destroyers, two of which were once a part of the U. S. Navy, brought 162 newly commissioned ensigns to Apra Harbor, Guam, in June for a two-day visit.

The new Japanese ensigns were on a 10-week cruise to become acquainted with the ports and peoples of the Pan-Pacific area. After leaving Guam, the ships of the Japanese Maritime Self-Defense Force were scheduled for stops at Noumea, Melbourne, Sydney, Wellington and Suva.

During their first visit to Guam, the 1172 men of the Japanese training squadron went sightseeing, held open house aboard their ships and presented a band concert which was televised on the local station.

YESTERDAY'S NAVY

On 2 Sep 1782, the United States government presented the 74-gun line-of-battle ship *America* to Louis XVI of France to replace *Magnifique*, lost in Boston Harbor. On 3 Sep 1783 a definitive treaty of peace was concluded with Great Britain and the United States was acknowledged as a sovereign and independent state. On 4 Sep 1804, USS *Intrepid* blew up with a loss of 13 lives. On 4 Sep 1862, the Confederate steamer *Florida* slipped past the blockading Federal squadron off Mobile, Ala. On 11 Sep 1943 Italy's fleet surrendered.

DD Crew Goes to Aid of Flaming Tanker

In Kaohsiung Harbor, Taiwan, early one April morning last year, two violent explosions rocked the Nationalist Chinese tanker SS *Kwang Lung*. The tanker, which had been refueling, crackled with flames. The lives of 13 Chinese were snuffed out. Another 26 were seriously injured.

Destroyermen on board USS *Prichett* (DD 561) were quick to respond. The echoes of the explosions had barely died, when *Prichett,* moored nearby, had mustered a 36-man team of volunteer fire-fighters and rescue workers.

The flaming ship still held 3000 tons of aviation gasoline, which had miraculously not ignited. This posed a threat not only to the dock area, but to the city of Kaohsiung as well. Another explosion could ignite the fuel dock to which the tanker was secured, which, in turn, could touch off a chain of fire that might soon envelop the entire city. Adding to the hazard were large pockets of explosive gases which filled many of the ship's compartments. These had to be pinpointed.

While other members of the *Prichett* fire-fighting team tended to the flames, the dead and the injured, destroyerman Omar Cooper, SF1, donned an oxygen breathing apparatus and walked alone into the smoldering after superstructure taking explosimeter readings. He found no fires, but did find large pockets of highly explosive gases. This enabled the firemen to concentrate their efforts on portions of the ship then known to be the most dangerous.

Three and a half hours after the destroyermen boarded the tanker the fires were out.

It's been more than a year since that fiery morning in Kaohsiung Harbor. Since then, volunteer fireman Cooper and other members of the *Prichett* rescue team have been transferred to other commands. Word of *Prichett's* participation in the rescue work had spread throughout the Destroyer Force, but the names of the men who were there had not.

PIN-UP — Omar Cooper, SF1, USN gets Navy Commendation Medal for his role in extinguishing a shipboard fire at Kaohsiung, Taiwan.

Cooper, for example, was transferred from *Prichett* to USS *Collett* (DD 730). Many of *Collett's* destroyermen had not known of Cooper's role in the Kaohsiung fire, though most had heard of the incident.

During ceremonies on board *Prichett, Collett* and other commands, the Destroyer Force recently saluted the *Kwang Lung* fire and rescue workers. Twelve of the *Prichett* volunteers were awarded the Navy Commendation Medal; the other 24 were presented with Letters of Commendation.

Citations which accompanied the medals told about some of the men's efforts. Cooper's read like this:

"For meritorious achievement in connection with the explosion and fire on board the gasoline-laden tanker SS *Kwang Lung*, in Kaohsiung Harbor, Taiwan, on the morning of 5 Apr 1961. As a member of the USS *Prichett* fire and rescue party, Cooper rendered valuable assistance in bringing under control and extinguishing the fire on the burning tanker, which was loaded with 3000 tons of gasoline.

"By his daring and skillful efforts in the face of grave hazards, he aided materially in preventing a possible major disaster. His conduct throughout was in keeping with the highest traditions of the United States Naval Service."

Commented Rear Admiral Clyde J. Van Arsdall, Jr., Commander Destroyer Flotilla One, as he presented Cooper with the Navy Commendation Medal: "The Navy does not have a corner on heroes, but when the need arises, the Navy does not fail to produce them."

Today's Destroyer Force seems to have its share.

Here's a list of the men who were awarded the Navy Commendation Medal for their actions:

CAPT John D Chase, USN
CDR W. S. Mills, USNR
LT H. F. Lecky, Jr., CHC, USN
LTJG L. H. Glossner, USNR
LTJG J. G. McDaniel, USN
ENS E. F. Bryan, USNR
ENS C. R. Shuler, USN
ENS G. E. Smith, Jr., USNR
N. E. Smith, EMC, USN
B. Moncure, MMC, USN
O. E. Cooper, Jr., SF1, USN
T. L. Nelson, HM1, USN

These men have received Letters of Commendation:

LT H. B. Dowse, USN
LTJG R. L. Kershner, USN
G. A. Brett, SF2, USN
P. D. Haddock, EM3, USN
S. L. Chew, Jr., FN, USN
M. C. Heglin, FN, USN
R. M. Bolton, MMFA, USN
W. T. Fraser II, EM2, USN
O. R. Kincaid, FN, USN
H. Chennault, BM2, USN
D. E. Tucker, ICFN, USN
F. D. Payne, DC2, USN
F. A. Hogan, FN, USN
K. M. Payton, FA, USN
E. J. Ligenza, Jr., BT3, USN
E. Gopez, EMFN, USN
J. J. Cleveland, Jr., SN, USN
C. R. Bowen, MR3, USN
K. A. Young, SN, USN
J. D. Hall, SN, USN
R. J. Johnson, EN3, USN
L. E. Vidal, CS2, USN
F. L. Kutcher, SN, USN
R. L. Stuart, FN, USN

Nicholas Is Oldest DD

USS *Nicholas* (DD 449) celebrated the 20th anniversary of her commissioning on 4 June. Based on this date, she claims to be the oldest active duty destroyer in the Navy—22 days older than *O'Bannon* (DD 450) and 26 days older than *Fletcher* (DD 445).

Nicholas has quite a record, which includes a Presidential Unit Citation, and she claims to have shot down eight planes and sunk two submarines.

On 5 Jul 1943, Task Group 36.1, which included *Nicholas,* was attempting to intercept a fast-moving group of Japanese destroyers in Kula Gulf in the Solomon Islands.

USS *Honolulu* (CL 48) established radar contact with the enemy at 0136 on 6 July. The task group moved into a single-column battle formation with *Nicholas* and *O'Bannon* in the lead, followed by *Honolulu, Helena* (CA 75) and *St. Louis* (CL 49) with *Jenkins* (DD 447) and *Radford* (DD 446) bringing up the rear.

The Japanese flagship *Niizuki* sank under the initial attack of the task force. *Helena* was struck by three enemy torpedoes which slashed off her bow. *Helena* buckled in the middle and began to sink. She went down shortly after.

Nicholas and *Radford* were detached to pick up survivors but they were interrupted by the Japanese destroyer *Amagiri* which was looking for survivors from *Niizuke.*

Both *Nicholas* and *Amagiri* fired torpedoes which proved to be ineffective. Our destroyers began shelling *Amagiri* and scored a direct hit on the enemy's radio room and knocked out her fire control gear. *Amagiri* fled.

Two other Japanese destroyers within sight of the gunfire headed for the southern exit of the gulf while a third, *Mochizuki,* steamed north hugging the coastline of Kolombangara Island.

The U. S. ships picked *Mochizuki* up on radar, however, and gave chase. *Nicholas* and *Radford* overtook the Japanese ship and opened fire with their five-inch guns, scoring several hits. The wounded *Mochizuki* laid a smoke screen and fled to safety.

Since daylight was approaching, bringing with it the threat of Japanese air attack, *Nicholas* and *Radford* also laid down a smoke screen and left the scene.

Nicholas and *Radford* returned to the area where *Helena* had sunk to continue rescue operations.

On 17 Feb 1944, while escorting three merchant ships from Hawaii to Kwajalein, *Nicholas'* radar picked up a contact 24,000 yards away and headed for it. It proved to be a submarine which finally took several hits from *Nicholas'* five-inchers before submerging.

After the submarine submerged, *Nicholas* laid three depth charge patterns, the last of which produced a tell-tale oil slick.

On 12 Nov, *Nicholas,* in company with *Taylor* (DD 468) and *St. Louis,* contacted another diving submarine. After two series of depth charges were dropped by *Nicholas,* the submarine exploded.

Nicholas was placed out of commission in January 1947 after having earned 16 battle stars.

She was recommissioned 19 Feb 1951 and designated an antisubmarine destroyer.

On 1 Jul 1960, she was outfitted with a drone antisubmarine helicopter landing deck after a seven-month FRAM overhaul. Early this year, she was equipped with variable depth sonar to increase her detection abilities against submarines hiding in the ocean's thermal layers.

—William A. Tillinghast, JO2, USN.

ONE SCORE BEHIND — Underway and looking sharp after celebrating the 20th anniversary of her commissioning is USS *Nicholas* (DDE 449).

Towers Visits Down Under

Thanks to USS *Towers* (DDG 9), Australia has received a sneak preview of things to come in her own Navy. *Towers,* similar to ships of a new destroyer class now under construction by Australia, visited Sydney and Melbourne recently; it was Australia's first look at a DDG equipped with the *Tartar* surface-to-air guided missile system.

In Sydney, *Towers* demonstrated the operation of her *Tartar* launcher for approximately 5000 visitors. (The solid-fuel-propelled *Tartar* is the smallest of the Navy's surface-to-air missiles. The weapon is designed for use on destroyers as a main battery, or as a secondary battery on larger ships. The shipboard *Tartar* system selects, sets up and, if release is given, launches the missiles automatically.

In Sydney and Melbourne, *Towers* participated in ceremonies commemorating the 20th anniversary of the Battle of the Coral Sea.

STERN VIEW — USS *Hoel* (DDG 13) is placed into commission at U. S. Naval Shipyard, Charlestown, Mass.

Hoel Joins Fleet

Another Midwest-built guided missile destroyer, USS *Hoel* (DDG 13), has been commissioned at the Boston Naval Shipyard in Charlestown, Mass. USS *Henry B. Wilson* (DDG 7), *Lynde McCormick* (DDG 8) and *Robison* (DDG 12) were also built in Bay City, Mich., and commissioned in Charlestown.

Hoel and her three sister ships all sailed to Boston via the St. Lawrence Seaway. *Hoel* is the eighth guided missile destroyer to join the Fleet in Boston. Besides the four Bay City-built DDGs, there are USS *Charles F. Adams* (DDG 2), *John King* (DDG 3), *Sampson* (DDG 10) and *Sellers* (DDG 11). These four ships were built at Bath, Maine.

The guided missile destroyer *Hoel*, with a crew of 20 officers and 320 enlisted men, is equipped with *Tartar* and carries *Asroc* (a rocket-propelled antisubmarine rocket weapon), in addition to antisubmarine torpedoes and two 5-inch/54 rapid fire guns. She is powered by two steam turbines which can develop 70,000 horsepower to push the ship to speeds in excess of 30 knots.

The 437-foot *Hoel* is the second ship to be named in honor of Acting Volunteer Lieutenant Commander William R. Hoel, USN, who distinguished himself in gunboat action during the Civil War. (Mrs. Harry H. Long, granddaughter of Lieutenant Commander Hoel, was sponsor for *Hoel.*)

The first ship named *Hoel* was DD 533, which was commissioned in July 1943. The ship saw extensive action in the Pacific before being sunk on 25 Oct 1944 with a loss of 268 men.

Commander Allen W. Slifer, USN, is commanding officer of the new 4500-ton ship. He entered the Navy as an enlisted man 22 years ago. He has since served in both cruisers and destroyers. His most recent duty was as Operations Officer aboard USS *Oklahoma City* (CLG 5) in the Pacific.

Captain Slifer will soon be returning to the Pacific. *Hoel* is scheduled to become part of Destroyer Squadron 1, homeported in San Diego, Calif.

CruDesLant Reorganizes

The Atlantic Fleet's Cruiser-Destroyer Force has been the subject of a reorganization study for some time. The resultant plan for force reorganization was approved by the Chief of Naval Operations and became effective this summer.

The basic organization under the new plan established six cruiser-destroyer flotillas, each of which contains approximately three squadrons of destroyer type ships.

Four of these flotillas will contain cruisers in addition to the destroyer squadrons. The remaining two flotillas will contain destroyer and escort squadrons only.

No changes of home ports are contemplated for either destroyer types or cruisers as a result of this new organization, and current destroyer divisions and squadrons are retaining their present organizational compositions.

The flagship of Commander Cruiser Destroyer Force, Atlantic Fleet, is the destroyer tender USS *Yosemite* (AD 19) based at Newport, R. I.

These, briefly, are the significant aspects of the organizational change:

- Commander Destroyer Flotilla Two (COMDESFLOT TWO) became Commander Cruiser-Destroyer Flotilla Two (COMCRUDESFLOT TWO) and flies his flag in the frigate USS *Mitscher* (DL 2) at Newport, R. I.
- Commander Destroyer Flotilla Four (COMDESFLOT FOUR) became Commander, Cruiser-Destroyer Flotilla Four (COMCRUDESFLOT FOUR). His flagship is the frigate *Norfolk* (DL 1) at Norfolk, Va.
- Commander Destroyer Flotilla Six (COMDESFLOT SIX) became Commander Cruiser-Destroyer Flotilla Six (COMCRUDESFLOT SIX) whose flagship is USS *MacDonough* (DLG 8) at Charleston, S. C.
- Commander Cruiser Division Two (COMCRUDIV TWO) became Commander Cruiser-Destroyer Flotilla Eight (COMCRUDESFLOT EIGHT) on board the guided missile cruiser USS *Little Rock* (CLG 4) at Norfolk, Va.
- Commander Cruiser Division Four (COMCRUDIV FOUR) became Commander Cruiser-Destroyer Flotilla Ten (COMCRUDESFLOT TEN) and is in the guided missile cruiser USS *Boston* (CAG 1) at Boston, Mass.
- Commander Cruiser Division Six (COMCRUDIV SIX) became Commander Cruiser-Destroyer Flotilla

Hood Is Good In Refuel Duel

Champlain has a new champ for approach and rig time while refueling at sea. Recently, USS *John Hood* (DD 655) moved in from 300 yards astern of USS *Lake Champlain* (CVS 39), rigged for refueling, and started to receive fuel in five minutes and 25 seconds.

For destroyers refueling from USS *Lake Champlain*, this was a new approach-to-pumping (a combination of approach time and rig time) time. *Hood* had trimmed 30 seconds off a previous record that had been set by USS *Barry* (DD 933) a year before. Nearly 300 attempts had been made to best *Barry's* record before *Hood* finally pulled it off.

After the record-breaking approach and rig time, the Task Group Commander sent the following message to *Hood*: "The spirit and morale of you and your crew were admired by all of us. It is a pleasure to have you in the task group."

More than half of *Hood's* crew are New York City Naval Reservists who were recalled to active duty last October. The ship was returned to inactive duty this month.

Twelve (COMCRUDESFLOT TWELVE) with the guided missile cruiser USS *Canberra* (CAG 2) at Norfolk, Va., as flagship.

Destroyer Kayoes Flattop

Don't let anyone tell you that destroyermen aren't tough. They'll tell you themselves that they are—usually at the drop of a hat. And currently listed among the more thoroughly convinced is the crew of the antisubmarine warfare support aircraft carrier USS *Intrepid* (CVS 11).

Intrepid, carrying a crew (including air group) of more than 2000, officer and enlisted, and the destroyer USS *Norris* (DD 859) with a complement about one-tenth as large, were among a group of ships which dropped anchor at Guantanamo Bay, Cuba, for a week-end not so long ago.

On the docket, along with some eagerly awaited liberty aboard the Navy Base after three weeks at sea, was a scheduled Saturday night boxing smoker, matching nine *Norris* mittsters with a like number of *Intrepid* ringmen.

One thousand spectators gathered on *Intrepid's* number one elevator at the appointed time—and more than a few carriermen in attendance wore slightly patronizing expressions. Some two hours later, however, all that had changed—and the dazed *Intrepid* boxers and their equally stunned shipmates were still trying to get the number of that truck.

In rapid succession Fireman Dick Copeland, Fireman Bill Church, and Seaman Bob Lutz bombed their way to TKO victories, and teammates Machinist's Mate Second Class Charles Andrews, Ship's Serviceman Second Class Ervin Adams, Seaman Don Kemper, Gunner's Mate Third Class Winston Hooper and Seaman Denver Criss reeled off unanimous decision wins, as the battling destroyermen won eight of the nine bouts staged.

Shelton Is Seventh Fleet's Best

The Seventh Fleet's USS *Shelton* (DD 790) has steamed off with "Best Destroyer" honors after three months of competition in antisubmarine warfare operations with Carrier Division 15. *Shelton*, skippered by CDR M. J. Schwitters, USN, nosed out seven other CarDiv 15 DDs for the award. Competition was based on the division's hunter-killer operations from January through March 1962.

CarDiv 15 is comprised of Destroyer Divisions 92 and 252, the carrier USS *Bennington* (CVS 20), and Carrier Air Group CVSG-59. Squadrons which operate from *Bennington* as air group units are VS-33 and VS-38, both of which fly the S2F *Tracker;* HS-8, which operates the HSS-1N *Sea Bat* whirlybird; and a detachment of VAW-11 AD5-W *Skyraider* aircraft.

Air units receiving "best" honors in the quarterly competition were:

Best VS flight crew—(VS 38) CDR T. W. Mullen, LT M. P. Moesen, W. C. Joslin, AO2, and H. D. Ellis, AT2.

Best HS aircrew—(HS-8) LT E. R. Palmer, LTJG A. J. Blanchard, J. E. Stevenson, SOA2, and R. P. Ping, SOA3

Best VAW-11 aircrew—LTJG R. C. Billingsley, LTJG H. J. Scarborough, and H. L. Potter, AT2.

First DD School Grads

The U. S. Naval Destroyer School at Newport, R. I., graduated its first class of 38 potential department heads last July.

The graduating class, composed of lieutenants and lieutenants junior grade, began its training on 8 January and completed a course designed to provide the Fleet Destroyer Force with officers who are proficient in all phases of shipboard duty.

Classes convene at the school four times a year and will provide about 100 professionally qualified destroyer officers annually.

CANNED' WALLABY — Mascot of USS Gurke (DD 783) gets better acquainted with CO, CDR R. E. Kipe, USN, during stopover in Hawaii.

Gurke's Mascot Is a Wallaby, Baby Kangaroo

Joey Wallaby is a girl and she's aboard USS *Gurke* (DD 783) in the Pacific. She's a great friend of most of the crew. She likes the arrangement and so do her friends.

Just to make it official, Joey has a service jacket, a shot card and a pay record.

As you may have heard, strange things sometimes happen in the Far East. When the ship was in Cairns, Queensland, Australia, Dean H. Beeler, SM1, USN, bought Joey for $100 and gave her to the crew. CDR Richard E. Kipe, USN, CO of *Gurke*, welcomed her aboard and gave her official status.

Joey goes on liberty with some of her friends whenever the ship hits port. She is not, however, an expensive date. She doesn't enjoy movies or other such entertainment too much, and her favorite dinner is canned dog food.

While underway, Joey has the run of the ship. When the weather permits, she sleeps on deck near the bridge in a well-ventilated private room which was presented to her by the Long Beach Naval Shipyard.

The crew of *Gurke* think Joey is the only Australian miniature kangaroo mascot aboard a U.S. Navy ship.

Navy Honor Roll

PHRASES SUCH AS "Above and beyond the high standards expected of Navymen and Navy ships," "Distinguished by outstanding heroism in action against the enemy," and "Distinguished conspicuously by gallantry and intrepidity at the risk of life above and beyond the call of duty" are sprinkled generously throughout the citations accompanying awards of the Presidential Unit Citation and the Navy Unit Commendations awarded destroyers and other Navy ships.

What does it take to earn a PUC or NUC? Here are the criteria, as set forth in the *U. S. Navy and Marine Corps Awards Manual* (NavPers 15790).

For the PUC, "The unit must have clearly rendered itself conspicuous by action of a character comparable to that which would merit the award of a Navy Cross to an individual. The performance of duty in carrying out a mission under the ordinary hazards of war, or participation in extended periods of combat duty, or in a large number of combat missions, does not in itself justify the award, which is designed to recognize specific acts of heroism on the part of the unit acting as a team. An award will not

Presidential Unit Citation

USS *Alexander Dallas* (DD 199)—At Port Lyautey, French Morocco, 10 Nov 1942.

★USS *Barry* (DD 248)—Serving with Task Group 21.14 in the Atlantic area, 27 Jul to 25 Oct 1943.

USS *Bennion* (DD 662)—At Okinawa, 1 Apr to 1 Jun 1945.

USS *Bernadou* (DD 153)—At Safi, French Morocco, 8 Nov 1942.

★USS *Borie* (DD 215)—Serving with Task Group 21.14 in the Atlantic area, 27 Jul to 25 Oct 1943.

USS *Bronstein* (DE 189)—In the North Atlantic area, 29 Feb to 17 Mar 1944.

USS *Buchanan* (DD 484)—In the Pacific, 7 Aug 1942 to 26 Feb 1944.

★USS *Charles Ausburne* (DD 570)—Serving with Destroyer Squadron 23 at the Solomon Islands, 1 Nov 1943 to 23 Feb 1944.

★USS *Chatelain* (DE 149)—Serving with Antisubmarine Task Group 22.3 in French West Africa, 4 Jun 1944.

★USS *Claxton* (DD 571)—Serving with Destroyer Squadron 23 at the Solomon Islands, 1 Nov 1943 to 23 Feb 1944.

USS *Cole* (DD 155)—At Safi, French Morocco, 8 Nov 1942.

★USS *Converse* (DD 509)—Serving with Destroyer Squadron 23 at the Solomon Islands, 1 Nov 1943 to 23 Feb 1944.

USS *Cowell* (DD 547)—At Okinawa, 1 Apr to 17 Jun 1945.

★USS *Dennis* (DE 405)—Serving with Task Unit 77.4.3 at Samar, Philippines, 25 Oct 1944.

★USS *Du Pont* (DD 152)—Serving with Task Group 21.13 in the Atlantic area, 14 Nov to 29 Dec 1943.

★USS *Dyson* (DD 572)—Serving with Destroyer Squadron 23 at the Solomon Islands, 1 Nov 1943 to 23 Feb 1944.

USS *England* (DE 635)—In the Pacific, 19 to 31 May 1944.

USS *Evans* (DD 552)—At Okinawa, 11 May 1945.

★USS *Flaherty* (DE 135)—Serving with Antisubmarine Task Group 22.3 off French West Africa, 4 Jun 1944.

★USS *Francis M. Robinson* (DE 220)—Serving with Antisubmarine Task Group 22.2 in the Atlantic area, 4 May to 3 Jul 1944.

USS *Frost* (DE 144)—In the Atlantic ocean area, 24 Mar to 8 May 1945.

★USS *Goff* (DD 247)—Serving with Task Group 21.14 in the Atlantic area, 27 Jul to 25 Oct 1943.

★USS *Haverfield* (DE 393)—Serving with Antisubmarine Task Group 22.2 in the Atlantic area, 4 May to 3 Jul 1944; serving with Task Group 22.3 in the Atlantic area, 1 to 24 Aug 1944; serving with Task Group 22.11 in the Atlantic area, 26 Feb to 25 Mar 1944.

★USS *Heermann* (DD 532)—Serving with Task Unit 77.4.3 at Samar, Philippines, 25 Oct 1944.

★USS *Hoel* (DD 533)—Serving with Task Unit 77.4.3 at Samar, Philippines, 25 Oct 1944.

USS *Hugh W. Hadley* (DD 774)—At Okinawa, 11 May 1945.

★USS *Janssen* (DE 396)—Serving with Task Group 22.2 in the Atlantic area, 4 May to 3 Jul 1944; serving with Task Group 22.3 in the Atlantic area, 1 to 24 Aug 1944; serving with Task Group 22.11 in the Atlantic area, 26 Feb to 7 Apr 1944.

★USS *Jenks* (DE 665)—Serving with Antisubmarine Task Group 22.3 off French West Africa, 4 Jun 1944.

★USS *John C. Butler* (DE 339)—Serving with Task Unit 77.4.3 at Samar, Philippines, 25 Oct 1944.

USS *John D. Ford* (DD 228)—In Java Campaign, 23 Jan to 2 Mar 1942.

★USS *Johnston* (DD 557)—Serving with Task Unit 77.4.3 at Samar, Philippines, 25 Oct 1944.

USS *Laffey* (DD 459)—In the Southwest Pacific, 15 Sep to 13 Nov 1942.

USS *Laffey* (DD 724)—At Okinawa, 16 Apr 1945.

★USS *Lea* (DD 118)—Serving with Antisubmarine Task Group 21.12 in the Atlantic area, 20 Apr to 21 Jun 1943.

USS *Maury* (DD 401)—In the Pacific, 1 Feb 1942 to 6 Aug 1943.

USS *Nicholas* (DD 449)—At Kolombangara Island, New Georgia, and Solomon Islands, 5 to 6 Jul 1943.

USS *O'Bannon* (DD 450)—In the South Pacific, 7 Oct 1942 to 7 Oct 1943.

★USS *Pillsbury* (DE 133)—Serving with Antisubmarine Task Group 22.3 off French West Africa, 4 Jun 1944.

USS *Pope* (DD 225)—In the Southwest Pacific area, 23 Jan to 1 Mar 1942 and serving with Antisubmarine Task Group 22.3 off French West Africa, 4 Jun 1944.

USS *Radford* (DD 446)—At Solomon Islands, 5 to 6 Jul 1943.

★USS *Raymond* (DE 341)—Serving with Task Unit 77.4.3 at Samar, Philippines, 25 Oct 1944.

★USS *Samuel B. Roberts* (DE 413)—Serving with Task Unit 77.4.3 at Samar, Philippines, 25 Oct 1944.

USS *Smith* (DD 378)—At Santa Cruz Islands, 26 Oct 1942.

★USS *Spence* (DD 512)—Serving with Destroyer Squadron 23 at the Solomon Islands, 1 Nov 1943 to 23 Feb 1944.

★USS *Stanly* (DD 478)—Serving with Destroyer Squadron 23 at the Solomon Islands, 1 Nov 1943 to 23 Feb 1944.

USS *Sterett* (DD 407)—At Guadalcanal, Solomon Islands, 12 to 13 Nov 1942.

★USS *Swenning* (DE 394)—Serving with Task Group 22.2 in the Atlantic area, 4 May to 3 Jul 1944; serving with Task Group 22.3 in the Atlantic area, 1 to 24 Aug

# of Destroyermen

be made to a large unit for actions of one or more of its component parts, unless such large unit performed as a total team in a manner justifying the award." (A Navy Cross is awarded to any person "who, while serving in any capacity with the naval service of the United States, distinguishes himself by extraordinary heroism in connection with military operations against an armed enemy.")

For the NUC, "The unit must have performed service as a unit of a character comparable to that which would merit the award of a Silver Star Medal or a Legion of Merit to an individual. Normal performance of duty under the ordinary hazards of war, or participation in extended periods of duty or in a large number of combat missions does not in itself justify the award."

Below you will find a list of those destroyers and destroyer escorts that have been awarded a Presidential Unit Citation or Navy Unit Commendation during World War II or the Korean conflict. Those marked with a star (★) were cited as a member of a task group which was awarded a PUC or NUC. Those without a star have been cited individually.

1944; serving with Task Group 22.11 in the Atlantic area, 26 Feb to 19 Apr 1944.

***USS Wadsworth* (DD 516)—At Okinawa, 17 Apr to 24 Jun 1945.**

★*USS Wilhoite* (DE 397)—Serving with Antisubmarine Task Group 22.3 in the Atlantic area, 1 to 24 Aug 1944.

★*USS Willis* (DE 395)—Serving with Antisubmarine Task Group 22.2 in the Atlantic area, 4 May to 3 Jul 1944; serving with Task Group 22.3 in the Atlantic area, 1 to 24 Aug 1944; serving with Task Group 22.11 in the Atlantic area, 26 Feb to 19 Apr 1944.

Navy Unit Commendation

***USS Albert W. Grant* (DD 649)—At Leyte Gulf, 24 to 27 Oct 1944.**

***USS Ammen* (DD 527)—At Okinawa, 1 Apr to 24 Jun 1945.**

***USS Anthony* (DD 515)—At Okinawa, 1 to 19 Apr and 19 to 24 Jun 1945.**

***USS Bailey* (DD 492)—At Komandorski Islands, Bering Sea, 26 Mar 1943.**

***USS Barton* (DD 722)—At Okinawa, 21 Mar to 30 Jun 1945.**

***USS Bennett* (DD 473)—At Okinawa, 6 to 7 Apr 1945.**

***USS Bradford* (DD 545)—At Okinawa, 14 May to 16 Jun 1945.**

***USS Brown* (DD 546)—At Okinawa, 10 Apr to 16 May 1945 and 16 to 20 Jun 1945.**

***USS Bryant* (DD 665)—In Saipan/Tinian area, 12 Jun to 2 Aug 1944; at Palau, 6 to 29 Sep 1944; at Surigao Strait, 24 to 25 Oct 1944; at Iwo Jima, 14 Feb to 9 Mar 1945; at Okinawa, 21 Mar to 18 Apr 1945.**

***USS Buckley* (DE 51)—In the Mediterranean, 5 to 6 May 1944.**

***USS Cassin Young* (DD 793)—At Okinawa, 25 Mar to 12 Apr 1945; 30 May to 15 Jun 1945; 18 Jul to 8 Aug 1945.**

★*USS Collett* (DD 730)—Serving with Task Element 90.62 in the Korean area, 13 to 15 Sep 1950.

★*USS DeHaven* (DD 727)—Serving with Task Element 90.62 in the Korean area, 13 to 15 Sep 1950.

***USS Frederick C. Davis* (DE 136)—In the Anzio Campaign, 22 Jan to 23 Feb 1944.**

***USS Gainard* (DD 706)—At Okinawa, 20 Apr to 30 Jun 1945.**

★*USS Gurke* (DD 783)—Serving with Task Element 90.62 in the Korean area, 13 to 15 Sep 1950.

★*USS Henderson* (DD 785)—Serving with Task Element 90.62 in the Korean area, 13 to 15 Sep 1950.

***USS Herbert C. Jones* (DE 137)—In the Anzio Campaign, 23 Jan to 16 Feb 1944.**

***USS Heywood L. Edwards* (DD 663)—In Saipan/Tinian operations, 29 May to 29 Jul 1944; at Palau, 5 to 29 Sep 1944; at Battle for Surigao Strait, 24 to 25 Oct 1944; at Iwo Jima, 10 to 27 Feb 1945; at Okinawa, 21 Mar to 28 Jul 1945.**

***USS Hickox* (DD 673)—In the Pacific, 19 Mar 1945.**

***USS Hilary P. Jones* (DD 427)—At San Remo, Italy, and Port Maurizo, Italy, 17 to 18 Sep 1944.**

***USS Hudson* (DD 475)—In the Okinawa Campaign, 1 Apr to 10 May 1945.**

***USS Ingraham* (DD 694)—In the Okinawa area, 4 May 1945.**

***USS Irwin* (DD 794)—In the Battle off Samar, 24 Oct 1944.**

***USS John C. Butler* (DE 339)—At Okinawa, 20 May 1945.**

***USS Johnnie Hutchins* (DE 360)—In the Pacific, 9 Aug 1945.**

***USS Lowry* (DD 770)—At Okinawa, 30 Apr to 22 Jun 1945.**

★*USS Lyman K. Swenson* (DD 729)—Serving with Task Element 90.62 in the Korean area, 13 to 15 Sep 1950.

★*USS Mansfield* (DD 728)—Serving with Task Element 90.62 in the Korean area, 13 to 15 Sep 1950.

***USS Miller* (DD 535)—In the Pacific, 19 Mar 1945.**

***USS Morrison* (DD 560)—In Okinawa Operation, 4 May 1945 (first award); in the Battle off Samar, 24 Oct 1944 (second award).**

***USS Newcomb* (DD 586)—At Saipan/Tinian, 29 May to 5 Aug 1944; at Palau, 6 Sep to 1 Oct 1944; at Surigao Strait, 24 to 25 Oct 1944; at Iwo Jima, 10 Feb to 10 Mar 1945; at Okinawa, 21 Mar to 7 Apr 1945.**

***USS Plunkett* (DD 431)—At Anzio, Italy, 21 to 25 Jan 1944.**

***USS Prichett* (DD 561)—In Okinawa Campaign, 24 Mar to 7 Apr 1945 and 8 May to 13 Aug 1945.**

***USS Purdy* (DD 734)—In the Okinawa transport area, 12 Apr 1945.**

***USS Rall* (DE 304)—At Okinawa, 12 Apr 1945.**

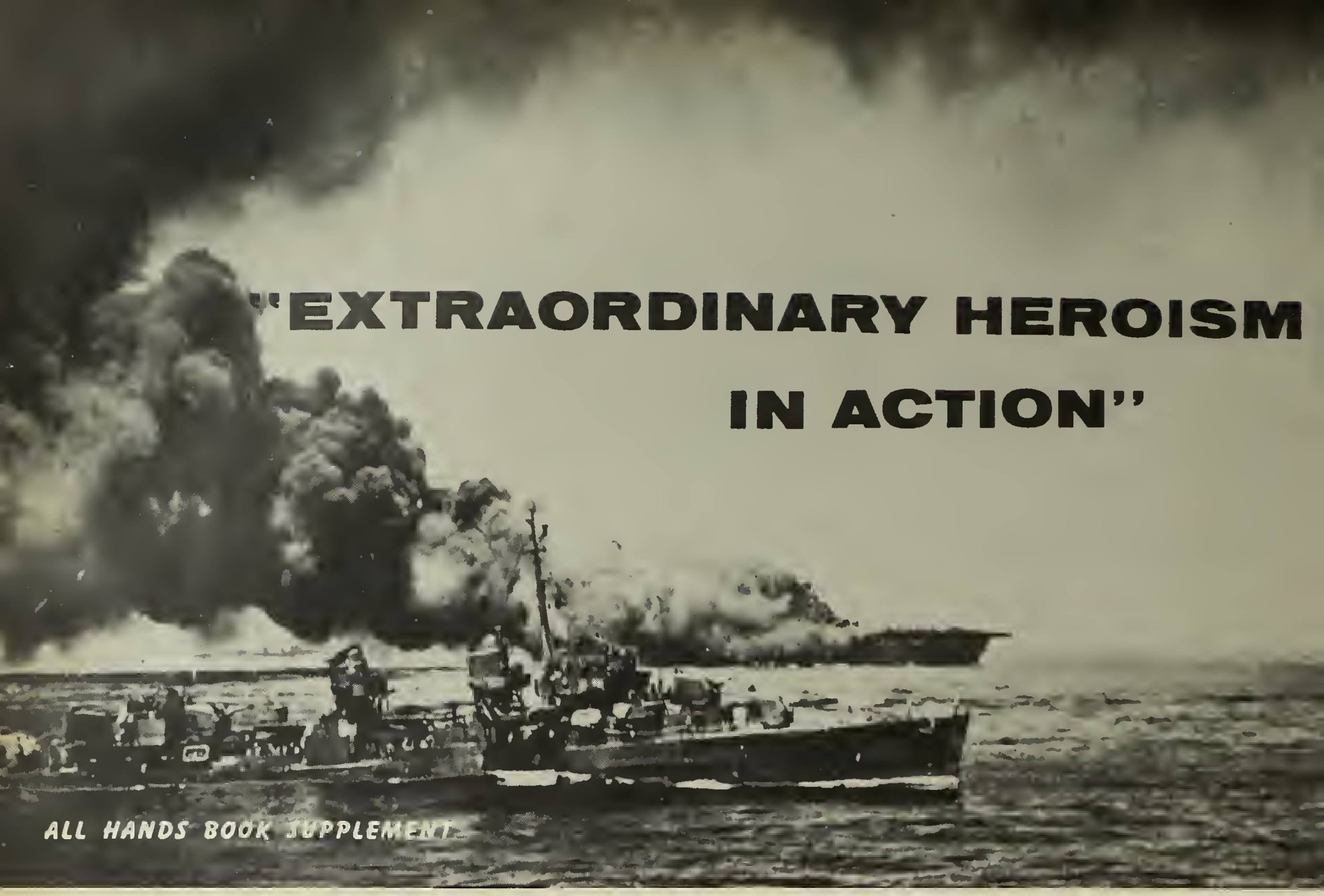
***USS Tabberer* (DE 418)—In the Western Pacific, 18 Dec 1944.**

***USS Taylor* (DD 468)—In the Solomons Campaign, 15 Mar to 7 Oct 1943.**

***USS Van Valkenburgh* (DD 656)—In the Okinawa Campaign, 1 Apr to 24 Jun 1945.**

***USS Wickes* (DD 578)—At Okinawa, 27 Mar to 15 May 1945.**

***USS Woolsey* (DD 437)—At Licata, Gaia, and Salerno, 9 Jul to 25 Aug 1943 and 9 to 13 Sep 1945; in Oran area, 16 Dec 1943; at Anzio, Italy, 21 Jan to 17 Feb 1944; in Southern France, 13 Aug to 23 Sep 1944 and 21 Oct to 28 Nov 1944.**



"EXTRAORDINARY HEROISM IN ACTION"

ALL HANDS BOOK SUPPLEMENT

During World War II, no less than 50 destroyers and escort vessels were awarded Presidential Unit Citations for extraordinary heroism in action under almost every imaginable circumstance. Here is a necessarily brief résumé of these actions, highlighted by the deeds of representative ships, which led to the awards.

DALLAS (DD 199), *Cole* (DD 155) and *Bernadou* (DD 153) each received their PUC for participation in the North African campaign when they helped land troops at Port Lyautey and at Safi Harbor in November 1942. In a sense it might be said that they served as one of the earliest amphibious landing forces in World War II. A more complete story of their adventures may be found on page 14.

It frequently happens that PUCs are awarded a ship or group of ships as the result of a brief, intense action. *Barry* (DD 248), *Borie* (DD 215) and *Goff* (DD 247) experienced many intense actions while serving as part of Task Group 21.14 in the Atlantic area but the period for which they were awarded their PUCs extended from 27 Jul to 25 Oct 1943.

Sub hunting was good at that time. There were plenty of them. During the first cruise of the Task Group, with USS *Card* (CVE 11) as plane carrier, planes and DDs succeeded in presumably sinking six subs and damaging two more. Then they fell into a routine. From Norfolk to Bermuda to Casablanca; a few days' liberty while battle damage was repaired and supplies taken on. Then back to the milk run again which would end in Norfolk. When another four-stacker, *DuPont* (DD 152) was added, TG 21.14 was ready to tackle anything.

For *Borie*, however, it was to be her last cruise. Late in the evening of 31 October, the sea grew rough enough so that, at flank speed of 27 knots, sufficient black water came over the bridge 30 feet from the surface to break four of her portholes. At that time, she established contact with a sub and laid a series of depth charges which brought the sub—*U-405*—to the surface.

HOWEVER, THIS ONE didn't roll over and sink as the others had done. *405* was big and tough and new. As *Borie* opened fire with her 4-inch deck guns, *405* tried to reply, but could not man her big gun because of the huge waves. The aged destroyer and the big sub circled each other in the black, wildly pitching sea. Finally, the CO of *Borie*, LT Charles H. Hutchins, USNR, was able to ram the sub. Her bow damaged by the collision, *Borie* rode up over the enemy's stern.

For a long, long 10 minutes the two vessels were locked together while the enemy came storming from below in a desperate attempt to board *Borie*. Forward, the sub's deck-gunners clung to their mounts and from the bridge, rifle fire swept *Borie's* decks. At such close quarters, the destroyer was unable to bring her guns to bear, so her crew threw everything they could into the fight.

Pistols and rifles contributed to the hectic din. A German gunner attempted to board and was stopped by a hurled sheath knife. Hot-shell men flung their empty shell cases. A *Borie* man, for lack of a better weapon, opened fire with a Very pistol and the U-boat's bridge was lighted with delicate falling stars. Volleys of fire riddled the submarine's conning tower; a burst from a machinegun brought smoke from the structure and, a moment later, it broke into flames.

The heavy seas which had wedged the two vessels together, chose this moment to wash them apart. The U-boat slipped out from under the bow of the destroyer and drifted away. But nearly 25 years of service and the impact against the hull of the sub were too much for *Borie*. Her forward engine room was taking water rapidly.

EVEN NOW, THE BATTLE was not over. Bear in mind that all this occurred in seas which would cause the best of ships under the best of conditions to proceed warily.

Unable to dive, the sub crawled away on the surface, her skipper doing his best to avoid the crippled *Borie*. Once, tracking with radar, LT Hutchins tried to throw a torpedo attack. Again, in desperation, he tried to close in to ram and missed by inches. *405* tried to retaliate by ramming *Borie* but both were so exhausted this attack failed also. Like two groggy prizefighters, too tired to lift their arms but knowing the slightest push would bring victory, the two mortally wounded combatants threw their final punches at each other—the sub threatening with stern torpedo tubes, the destroyer with her 4-inch guns and shallow-set depth charges.

The end came when *Borie's* gunners finally got on target with their main battery. A salvo hit the sub's diesel equipment, bringing her to a standstill. The submariners fired pyrotechnic stars in signal of surrender and took to rubber boats as the sub went down.

Borie's crew attempted for another day to keep her afloat but finally, afraid that she would capsize, LT Hutchins gave the word to abandon ship.

CARD, BARRY AND GOFF also received PUCs for this period, but *DuPont* had to wait until her next cruise, this time with USS *Bogue* (CVE 9) as a part of Task Group 21.13 serving in the Atlantic area from 14 Nov to 29 Dec 1943 to earn hers.

FORCING A FIGHT — A well-placed depth charge brought the big and tough *U-405* to the surface.

On 8 December, the task group departed Casablanca to protect convoy UGS 23 until it had cleared the area infested by German submarine wolf packs. It was a good thing that the convoy had company. Four days later, early in the morning, a plane from *Bogue* sighted and bombed a surfaced sub less than 40 miles from the task group. *DuPont* and *George E. Badger* (DD 126) laid a barrage of depth charges and continued to pursue the sub through the day and the following night. Finally, at mid-morning the following day, *U-172* broached and came up fighting. The destroyers opened fire to explode the sub's conning tower in flames and the deck crew jumped overboard as the *U-172* sank and exploded underwater. During the cruise several running battles kept the task force busy day and night. Five successful attacks were made by the hard-hitting destroyers.

NO PUNCHES PULLED — Artist's conception shows USS *Borie* slugging it out with *U-405* in the North Atlantic.

THE NORTH ATLANTIC sub battle also provided the occasion of one of the strangest incidents of the war—the capture of *U-505* by USS *Guadalcanal* (CVE 60) and the rest of Task Group 22.3 on 4 Jun 1944. *Chatelain* (DE 149), *Pillsbury* (DE 133), *Jenks* (DE 665) and *Flaherty* (DE 135) received PUCs for their role.

At 1109, *Chatelain* made a sound contact and, through her depth charge attack forced the German submarine *U-505* to the surface just 12½ minutes after her first attack. (The first warning of danger to the sub was when *Chatelain's* depth charge attack came while all hands were sitting down to a peaceful Sunday dinner. The explosions smashed the lights, rolled the U-boat on her beam's ends and dumped everybody into the bilges under a heap of food and broken crockery. One of the submariners lost his head and made for the conning tower, crying that the after torpedo room was blown wide open and the boat was sinking. The CO made the mistake of taking his word for it, blew his tanks, surfaced, and gave the order to scuttle and abandon ship.)

Intent on capturing the submarine intact, all the DEs kept up a hot fire of small caliber weapons and drove the Germans from the decks and into the water so fast that they did not even have time to stop the sub's engines.

With the sub cruising along untended (except for a dead German on deck) at a brisk eight knots, the then Captain Daniel V. Gallery, USN, gave the order "Away all boarding parties," and whaleboats dropped into the water in pursuit of the wildly circling sub. LTJG Albert LeRoy David, USN, of *Pillsbury*, was the first aboard. In attempting to come alongside, rough seas forced *Pillsbury* into the sub, damaging the boat's diving planes and smashing the ship's forward plates so that the forward engine room and sound room were soon flooded.

Meanwhile, *Chatelain* had picked up more than 40 survivors from *U-505* who watched glumly from the forecastle as *Guadalcanal* passed a tow line to their sub and commenced the long tow from an area somewhat west of the Azores to Bermuda.

TEAMWORK — Many DDs won citations fighting alongside other ship types. Here destroyer guards carrier.

IT'S NICE TO HAVE your friends around you, but sometimes it seems as though you're fighting the battle of the Atlantic singlehanded. USS *Bronstein* (DE 189) was part of a task group, but for a few hours on one cold, stormy night, early in 1944, she felt terribly, terribly alone. During those hours, her crew [all of whom except the commanding officer, then LT (now CAPT) Sheldon Kenney, USN, were Reservists] found and attacked a U-boat that was headed for an attack on two sister DEs. In helping to sink the sub (*U-709*) she undoubtedly saved one or both of the DEs from certain destruction. Later that night, she sank a second sub (*U-603*). At the time, *Bronstein* had been in operation approximately seven weeks, four of which had been devoted to her shakedown cruise. With the exception of the skipper, only one officer, the exec, had ever been to sea before, and about 10 per cent of the enlisted personnel had seen sea duty.

The DEs *Frost* (DE 144), *Francis M. Robinson* (DE 220), *Haverfield* (DE 393), *Janssen* (DE 396), *Jenks* (DE 665), *Swenning* (DE 394), *Wilhoite* (DE397) and *Willis* (DE 395) also received PUCs for their actions against submarines in the Atlantic during 1944.

The four-stacker USS *Lea* (DD 118), a veteran of World War I, helped to guide convoy after convoy across the Atlantic during the early days of World War II. She had plenty of experience behind her when, during 21-22 May 1943, as a part of USS *Bogue's* (CVE 9) escort group, she took part in the first major engagement of the war between a hunter-killer group and enemy submarines attempting to rendezvous for a mass attack on a convoy. In one 24-hour period six attacks were made on submarines, ending in the sinking of *U-569* and the capture of 24 of her crew.

Lea had quite a career. Near the end of 1943, she was rammed and severely damaged by a convoy ship which went out of control and found herself lying helpless in midocean with fuel oil in her No. 2 engine room up to water level. Surviving a tow to Bermuda, she was repaired after a six months' wait, then finally shifted to the Solomons, where she sweated out the remainder of the war. She was finally decommissioned on 20 Jul 1945.

MEANWHILE, IN THE PACIFIC, DEs and DDs also managed to keep busy and in plenty of trouble. Here, the main task was not escorting convoys and antisubmarine warfare but, as a rule, slugging it out with surface ships, usually more numerous and frequently bigger. During the latter days of the war, kamikaze pilots were the main headaches—and occasions for more PUCs.

In any discussion of World War II Pacific warfare the name of Arleigh Burke and his Little Beavers is bound to arise. In 22 separate engagements from 1 Nov 1943 to 23 Feb 1944, the six destroyers of Destroyer Squadron 23, USS *Charles Ausburne* (DD 570), *Claxton* (DD 571), *Converse* (DD 509), *Dyson* (DD 572), *Spence* (DD 512) and *Stanly* (DD 478) were credited with the destruction of one Japanese cruiser, nine destroyers, one submarine, one auxiliary vessel, one coastal destroyer-minelayer, one large cargo vessel, four barges and approximately 30 aircraft. In 11 bombardments, several shore batteries, supply dumps and bivouac areas

A PROUD SHIP, USS *Chatelain* (DE 149) looks on as boarding party makes ready to tow *U-505* to the States.

were set afire and destroyed. Each of the ships was also awarded the PUC.

A brief description of one action, that of Buka Island on 24-25 November will illustrate the type of life these destroyers led. Ordered by VADM William F. Halsey, Jr., USN, to intercept a suspected evacuation of aviation personnel from Bougainville Island, the then Captain Burke led his squadron of six destroyers to a line running from Buka to St. George Channel where at 0141, 25 November, radar surface contacts were made about 22,000 yards to the east. *Ausburne, Claxton* and *Dyson,* covered by *Converse* and *Spence*, headed in for a torpedo attack. (*Stanly*, suffering from boiler trouble, was unable to make the run.) The targets were the Japanese destroyers *Onami* and *Makinami* about to be joined by three destroyer-transports which had just taken aboard the Buka personnel.

Maneuvering until about 50 degrees off the enemy's port bow, the three destroyers let go 15 torpedoes, then turned hard right 90 degrees to miss any the enemy might offer. The destroyer *Onami* disintegrated in a ball of fire which rose an estimated 300 feet. The destroyer *Makinami* exploded in flames and separated in two floating sections. Leaving *Converse* and *Spence* to finish off *Makinami*, the other three went on to attack the destroyer transports *Amagiri*, *Yugiri* and *Uzuki*, all of which fled at top speed.

At 0215, acting on a hunch, Burke ordered a sharp change of course to the right to avoid enemy torpedoes. The division steadied on a course of 060 degrees and about a minute later came back to course 015 degrees. At this moment three heavy explosions jarred the ships so heavily that the men of *Charles Ausburne* felt impelled to look at the bow to see whether or not it was still there. Since their ship was all in one piece, they were sure that one of the following ships had been hit. Each of those astern was of the opinion that another ship of the division had suffered a hit. The explosions were the torpedoes from *Yugiri* exploding at the end of their run in the wake of *Charles Ausburne* and her division.

Unable to close within torpedo-launching range, each of the three U. S. vessels opened fire with their two forward guns. Weaving from side to side in a fishtail maneuver, they avoided the return salvos of the enemy, although some came close enough to splash water on the bridge of one destroyer.

The three enemy destroyers separated on diverging courses and *Charles Ausburne* selected *Yugiri* as her victim. In firing dead ahead, the gun captain's hatch in *Charles Ausburne's* gun one was blown off by number two gun. Thereafter, the crew of number one gun continued to fire to the deafening roar of number two gun, which ruptured several eardrums and caused temporary deafness of the entire guncrew. Smoke and gases were blown down into the mount with every shot of number two gun, but the crew continued to fire at the maximum rate possible until they dropped from exhaustion or powder fumes.

At 0328, *Yugiri* sank from *Charles Ausburne's* gunfire. The other two transports escaped. During the action three Japanese destroyers had been sunk without the loss of a man or damage to any of the Little Beavers.

Five of the six ships survived the war and were placed in reserve or transferred to other, friendly nations. *Spence* was lost during a typhoon in the Philippine Sea in December 1944.

ANOTHER GROUP OF DESTROYERS and escort vessels, USS *Dennis* (DE 405), *Heermann* (DD 532), *Hoel* (DD 533), *John C. Butler* (DE 339), *Johnston* (DD 557), *Raymond* (DE 341) and *Samuel B. Roberts* (DE 413) won their PUCs as part of a task unit which took part in the battle of Samar, Philippines, 25 Oct 1944. The citation tells the story:

Silhouetted against the dawn as the Central Japanese force steamed through San Bernardino Strait toward Leyte Gulf, Task Unit 77.4.3 was suddenly taken under attack by hostile cruisers on its port, destroyers on the starboard and battleships from the rear.

Laying down a heavy smoke screen the task unit waged battle against the superior speed and fire power of the enemy, swiftly launching and rearming aircraft

SETTING SUN— Kamikaze planes, such as this one, figured in many WW II DD actions which led to PUCs.

and violently zigzagging in protection of vessels stricken with armor-piercing shells, anti-personnel projectiles and suicide bombers.

With one carrier of the group sunk, others badly damaged and squadron aircraft coordinating in the attacks by making dry runs over the enemy fleet as the Japanese closed in for the kill, two of the unit's destroyers and one escort vessel charged the battleships point-blank and, expending their last torpedoes in desperate defense of the entire group, went down under the enemy's shells as a climax to two and one-half hours of sustained combat.

During this battle the destroyers *Hoel* and *Johnston*, and the DE *Samuel B. Roberts* were sunk; by the time the engagement had ended, *John C. Butler* had expended all her 5-inch ammunition with the exception of a small quantity of antiaircraft projectiles.

USS BUCHANAN (DD 484) WON her PUC for her work in the Guadalcanal landings, and the New Georgia, Treasury-Bougainville, Solomon Islands, and Bismarck operations. She bombarded shore installations, performed rescues at sea (including 350 men from USS *Astoria*, CA 34), engaged in pitched battles with Japanese forces, acted as escort, covered landing operations, fought off enemy torpedo bombers, dive bombers and kamikaze pilots and chased and sank submarines. Although she fought during the entire war, the period for which she earned her PUC ran from 7 Aug 1942 to 26 Feb 1944 (an unusually long period for a PUC).

Similar "routine" chores were performed by almost all the ships of the Third and Fifth Fleets in the Pacific during this period, but a handful of destroyers and escort vessels have earned special distinctions.

USS *Maury* (DD 401), for example, is credited with sinking, or helping to sink, three light Japanese cruisers, 10 destroyers, one patrol vessel, and shooting down 10 enemy planes. She earned her PUC for her work during the early (1 Feb 1942 to 6 Aug 1943) operations, and received a total of 15 battle stars. She successfully survived the war.

USS *John D. Ford* (DD 228) and *Pope* (DD 225) fought together during the early, bitter days of the war, fighting a rear guard action as the Allies fell back toward Australia in early 1942. They were awarded their PUCs for their work in the Java campaign from 23 Jan to 2 March 1942. Both ships later saw action in the Atlantic.

USS *Nicholas* (DD 449) and *Radford* (DD 446) each earned their PUCs for their part in the rescue of the survivors of USS *Helena* (CL 50), sunk during the battle of Kula Gulf, 5, 6 Jul 1943. *Nicholas* rescued 291 survivors, taking Japanese ships under torpedo and gunfire during the rescue operations. When it came time to retire, one boat crew of *Radford* chose to remain in the vicinity of the sinking, and contributed to the rescue of approximately 85 additional survivors, including the commanding officer of *Helena*.

USS O'BANNON (DD 450) participated in one of the more publicized moments of the early days of the war when, finding a Japanese sub basking on the surface, *O'Bannon* scored hits on its conning tower. A fictionalized account had the destroyer's crew, unable to reach the armory for small arms, throwing potatoes at the Japanese trying to board the DD, and frightening them into thinking the potatoes were grenades. Actually, the sub submerged after its conning tower was damaged, and *O'Bannon* made three depth charge runs to sink it.

Although *O'Bannon* was awarded the PUC (for the period 7 Oct 1942 to 7 Oct 1943), 20 battle stars and other awards, no member of her crew ever qualified for the Purple Heart. She went through the battles of Guadalcanal and Leyte Gulf; helped sink a battleship, sank a cruiser, destroyer and submarine; shot down fighter planes and bombers; supported landings at New Georgia, Guadalcanal, New Guinea, Bataan and Corregidor (and saw Korean War action), without suffering serious damage. (These statistics about her charmed life are claims which still remain to be disproved.)

USS *Smith* (DD 378) also lived intensively for a few hours on 26 Oct 1942. During the battle of Santa Cruz, although *Smith* was badly crippled by an enemy torpedo plane crash landing on her forecastle, she managed to maintain position in the screen and keep firing all guns still serviceable. As her PUC citation reads in part:

". . . *Smith*, with her forward topside abandoned and aflame, gallantly held to her screening position on an aircraft carrier and fought off attacking planes until the fire could be extinguished." Despite this damage, she went on to fight the rest of the war.

USS STERETT (DD 407) WAS ANOTHER DD whose survival would appear to be a miracle if miracles were not so commonplace. Within 34 minutes of the Guadalcanal night battle, 12-13 Nov 1942, *Sterett* had received 11 hits and two near misses. Only her forward guns were still intact, but during the battle she had engaged three enemy vessels; one battleship (the *Hiyei*), one light cruiser, and one destroyer. Numerous fires were started on the bow of the cruiser, which later exploded. Two positive hits were scored on the BB from a range of 3000 yards; five-inch salvos from very close range caused fires on her superstructure and she was partially abandoned. The destroyer was taken under fire and blown up by two torpedo hits and two 5-inch salvos. More than 20 per cent of *Sterett's* men were casualties, yet she not only survived the battle, but went on to win 12 battle stars in the Asiatic-Pacific area.

Sterett earned her PUC in one night. It took *England* (DE 635) two weeks to earn hers, but in so doing she sank six Japanese submarines. She suffered no injuries during this period (19 to 31 May 1944), but later was severely damaged by a suicide plane.

JUST TO THOROUGHLY CONFUSE the record, there were two USS *Laffeys* during World War II, both destroyers, and both won PUCs. The first, DD 459, won her award for action in the Southwest Pacific area from 15 Sep to 13 Nov 1942. *Laffey* only survived three battles, but she fought them well. As her citation states: Braving hostile fire to rescue survivors from submarine-infested waters, *Laffey*, after fighting effectively in the battle off Cape Esperance, successfully repelled an aerial torpedo attack, and although badly crippled and set afire, inflicted severe damage on Japanese naval units off Savo Island.

Laffey II, more officially known as DD 724, earned her PUC at Okinawa, 16 Apr 1945. The preceding weeks had been busy, but on the 16th *Laffey* lived to full capacity for a few minutes. Attacked by more than 50 Japanese planes, Combat Air Patrol attempted to protect *Laffey* and although many were shot down, at least 22 got through. Of these, nine were downed by *Laffey's* own antiaircraft efforts and several more went down from a combination of antiaircraft and CAP. Eighty minutes after the attack started it was over. And *Laffey* had taken four bomb hits, five kamikaze hits, and was grazed by three more suicide attacks.

Of *Laffey's* men, 32 were killed or missing, and almost 70 more were wounded. Her steering gear was jammed 26° left, allowing her to steam only in circles. Fires and flooding were not yet under control. Her after twin five-inch mount was destroyed, as were seven of her 11 20mm guns and four of her 12 40mm guns. Automatic fire control was gone completely. Yet she lived to survive the trip to the States for repair and was ready to go again when peace was declared. To the best of our knowledge, she is still in commission.

LAFFEY'S EXPERIENCE is almost typical of those ships who went through the Okinawa campaign. Of these, the destroyers *Bennion* (DD 662), *Cowell* (DD 547), *Evans* (DD 552), *Hugh W. Hadley* (DD 774) and *Wadsworth* (DD 516) were selected to receive PUCs.

During the period from 1 Apr to 1 Jun 1945, the action was so intense as to almost defy description. Life aboard these ships can best be conveyed by again quoting from a PUC citation which might be common to all:

"For extraordinary heroism in action on radar picket duty during the Okinawa campaign. A natural and frequent target of the heavy Japanese aerial attack while occupying advanced and isolated stations, USS ——— defeated all efforts of enemy kamikaze and divebombing planes to destroy her. Constantly vigilant and ready for battle day and night, she sent out early air warning, provided fighter direction and, with her own fierce gunfire downed —— hostile planes, shared in the destruction of others and routed many more and she rendered valiant service in preventing the Japanese from striking in force the naval forces off the Okinawa beachhead. A valiant fighting ship, ——————, her officers and her men withstood the stress and perils of vital radar picket duty, achieving a gallant combat record which attests the teamwork, courage and skill of her entire company and enhances the finest traditions of the United States naval service."

Those final words just about sum up all we have to say about destroyer types and their men.

USS O'BANNON — If a ship could tell sea stories, O'*Bannon* (DD 450) would have some good ones to listen to.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

Destroyer's Main Battery

Sir: I just read your article in the April issue entitled "Destroyer's Best Friend" which was written by an erstwhile shipmate of mine.

Gad, sir! Since when are 5-inch/38 guns the main battery of a destroyer?

What happened to the 21-inch torpedo tubes shown in the fifth picture of the article. No doubt *Tingey's* crew was surprised by the change, too.

Does All Hands Magazine back the statement which was printed in the article that *Tingey's* main battery is its 5-inch/38 guns instead of its torpedoes?—J. J. H., LT, USN.

• *We will pass on to you the results of our research in the Destroyer Branch of the Ships Characteristics Division of the Office of the Chief of Naval Operations, to wit:*

Because of the varied duties of destroyers, the matter of what comprises their main battery is essentially a matter of semantics.

For instance, new construction destroyers don't mount surface action torpedoes. Many World War II destroyers have had their torpedo tubes removed or sealed off.

The question of what comprises the main battery of a destroyer is necessarily nebulous and depends primarily on the mission to which the ship is assigned.

In shore bombardments or antiair action, the 5-inch/38 guns or missile battery might properly be considered the main battery. On the other hand, in ASW action, the ASW weapons could be considered the main battery.

All Hands *considered the terminology used in the* Tingey *release plus the word from CNO as sufficient justification for using the words "main battery."*—Ed.

Tincan with a Band

Sir: I cannot refrain from pointing with pride at the band we now have aboard USS *Roberts* (DE 749). I have been deeply interested in such projects since I helped to organize a similar band while I was gunnery officer aboard USS *Haynsworth* (DD 700) from 1950 through 1952. All Hands carried a story about it.

I was recalled to active duty in October 1961 to serve as CO of *Roberts*, which had been a Group I Naval Reserve Training ship. One of the recalled Reservists, Benjamin J. Michalski, SN, is a professional musician who was encouraged to organize a band for *Roberts* when the ship reported for active duty last year. He brought his own accordion, amplifier, band stands and chairs aboard ship. I was able to get two saxophones and a guitar from the Music Branch in the Bureau of Naval Personnel. A set of drums was purchased by the Welfare and Recreation Fund. Other crew members furnished their own instruments. The band now has the following members:

Accordion—Ben Michalski, SN; alto sax—Sam Smith, SN; tenor sax—Bill Peeling, EN3; baritone sax—Mel Teske, SOG3; clarinet—Mike Tehanski, SOG3; trumpets — Bob Mayo, EN3; Andy Endres, SN, and Bob Bedell, FN; guitar—Israel J. Salazar, RD3; trombone—Bill White, FTG2; and drums—Bob Armstrong, YN3. Clayton (Doc) Bywaters, HM3, serves as vocalist and MC.

This 11-piece orchestra has established quite a name for itself. In Norfolk it was invited to play for the DESFLOT Four basketball tournament. It has also played at numerous smokers and happy hours aboard *Roberts*. It gave a concert during a visit to Baltimore, Md., and during a week end in Grand Cayman Island, our orchestra played for several ship's dances.

In Guantanamo Bay, Cuba, a combo from the band did a 15-minute live telecast over WGBY. The band has also played for several dances in Gitmo at the Teen-Age Center, Community Center and the Officers' Club.

It is great to have such an aggregation aboard and we are proud of them. I only hope that we can hold the band together after *Roberts* goes out of active duty.—J. S. Zimmerman, CDR, USN.

• *Just further confirmation of one of the theses advanced in the front of the magazine this month—destroyermen (and destroyers) are versatile. With your pride and enthusiasm as motivation, we're sure that* Roberts' *Ramblers will have a long and happy life—whether on active or inactive duty.*—Ed.

Anti-Submarine Destroyer

Sir: I share the elation of USS *Sproston's* crew on winning her "Es," "As" and "Cs" (All Hands, February 1962, page 43) but, if her crew hasn't already, I'd like to point out an error in your article. Since 25 Aug 1960, when SecNav Inst. 5030.1B was issued, the DDE has been officially known as an Anti-Submarine Destroyer, and not an Escort Destroyer.

Unfortunately, your staff is not the only one making this mistake. Perhaps you could use All Hands as a vehicle for correcting this mistake, and in so doing, educate a few more of our Navy. —CDR H. Riley, Jr., USN.

• *We're both wrong, Commander. Since you wrote your letter the Navy has reclassified all DDEs as just plain DDs, because both types are able to fight submarines. The change was made in OpNav Notice 5030 of 7 Jun 1962.*

Incidentally, here's another change. A DE, which until recently was called an "escort vessel," is now designated an "escort ship."—Ed.

Destroyer School

Sir: Your Letters to the Editor pages seem to provide an ideal resting place for all sorts of Navy records. Although they sometimes appear to be of the "most men reenlisted while the ship passed under the Brooklyn bridge" variety, it is a sound idea to give Navymen a place to do a little unrestrained bragging about their commands.

First of all, I would like to commend and comment on your excellent article about the Destroyer School which appeared in the May issue. Then I want to advertise a record which USS *Manley* (DD 940) now holds and one which I hope will be broken. *Manley* had one officer in the first class and three in the second class at the Destroyer School for a total of four in the two classes so far convened.

The Destroyer School is, of course, one of the greatest things to happen to the Destroyer Navy since the invention of the Gitmo Circle and, as your article pointed out, we in the Destroyer Navy are eagerly awaiting the finished product.

I might as well be completely candid about the ship's position in sending a student to this school, however. The officer nominated must be one of demonstrated ability and one a comanding officer would be prepared to accept as his own department head (or prospective one) upon completion of the course.

This is fine. However, because of the destroyer fleet-up system, the officer who fits this description is apt to be your own candidate for next engineer or gunnery or operations officer. Therefore, you cannot, as your article states, distribute his duties among other officers.

For example, if you have an engineer with only six months left on his tour, you should have a main propulsion assistant slated to fleet-up to engineer. If you send the MPA to destroyer school, you cannot distribute his duties to another officer (maybe the damage control assistant) who may have less than a year on board. This is a big problem, but one which each ship must solve for herself.—L. I. Smith, Jr., CDR, USN.

• *Since you were able to send three officers from your ship to a single class, it appears that you have this problem well in hand.*

You are correct, however, in pointing to this as a real problem aboard a small ship. With the small officer complement of a destroyer, it is discouraging to lose any man for six months, especially a well-trained officer who is well on his way to becoming a department head.

You mentioned in your letter that you often cannot distribute the duties of this type officer while he attends school. We obtained our information from school officials who told us that a student's duties are distributed among the other officers aboard. Frankly, we don't see how this can be avoided. Perhaps we have overlooked some possibilities.—ED.

HIGHLIGHT of fireworks display at the U. S. Naval Base, Yokosuka, Japan, was this creation by a U. S. Seventh Fleet destroyer group.

More on DD Command Quals

SIR: Several opinions on the importance of the DD Command Qualification have been expressed by officers of our staff. These opinions have led to some questions you may be able to answer.

(1) How many officers have actually qualified for DD command? Our guess is 200.

(2) What effect does the qualification have on assignment to a sea command?

(3) What effect, if any, does the qualification have on promotion?

(4) Does the Navy foresee a shortage of qualified DD commanding officers for the future?

(5) Is it true that many CDRs get two DD commands on a split-tour basis?

(6) Are officers who receive some experience on board DDs permitted to remain in the force and progress to a command status?

(7) Isn't it BuPers policy to have officers serve in all types and all line departments?—J. J. M., LCDR, USN.

• *Your questions are timely—60th anniversary of destroyers, you know. We suspect that some of the destroyermen to whom this issue of* ALL HANDS *is dedicated may have wondered about these things themselves. Here are the answers:*

(1) As of 1 Jan 1962, exactly 2505 officers had qualified for the DD Command Qualification. This number is broken down as follows: ADM, 73; CAPT, 905; CDR, 998; LCDR, 481; and LT, 48. (Incidentally, 400 of these officers qualified by taking the written exam, submitting a paper, and successfully passing the ship-handling practical work required by "BuPers Manual," Article C-7316, and CruDesPac/DesLant Joint Instruction 1210.1A.)

(2) Owing to the limited period of time in which the DD Command Qualification procedure has been in effect, many officers have not had the opportunity to acquire the qualification. Many of these officers' superior performance of duty will qualify them for command of a destroyer. It would be manifestly unfair to exclude officers from consideration who have, through no fault of their own, been in assignments outside the destroyer force. For the time being, those officers who have qualified may consider the DD Command Qualification as a "plus" factor, to be taken into account when they are eligible for consideration to DD command.

(3) The effect of the qualification

TWO-SOME — It was almost like seeing double when USS *Charles F. Adams* (DDG 2) and USS *Mitscher* (DL 2) moored at Charleston, S. C.

upon promotion chances is unpredictable. Performance is the greatest factor in promotion opportunities.

(4) No shortage of qualified DD commanding officers is foreseen. As a matter of fact, BuPers has a long waiting list of aspirants desirous of such an assignment. Nevertheless, there will always be room for topnotch performers to take command of our DDs.

(5) True; some commanders do receive more than one DD command. This is usually the result of a need for DD-trained officers in the new construction program.

(6) To a large extent, officers control their own careers by their performance and preferences for duty. Service needs and availability may lengthen, shorten, or preclude requested tours in specific ships or areas. However, any officer's "career pattern" is the sequence of assignments best calculated to permit him to demonstrate his qualifications as a line officer.

(7) Very few officers follow what is often called a "typical career pattern" because this is an average and it's seldom that two careers compare in duties and performance. Line officers should devote their energies toward qualification for command at sea. Any assignment which advances them toward this goal should be considered in "career interest," and, therefore, is in line with their career pattern.—Ed.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS MAGAZINE, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Briareus* (AR 12)—A reunion will be held for all who served on board from 1943 to 1947, at the Hotel Madison, Atlantic City, N. J., on 12, 13 and 14 October. For further details, write to D. J. Collins, 332 Kennedy Ave., Hempstead, N. Y.
- USS *North Carolina* (BB 55)—Former crew members who are interested in future reunions are invited to write to Charles M. Paty, Jr., USS *North Carolina* Battleship Association, Wilmington, N. C.
- USS *Westchester County* (LST 1167)—A reunion is being planned for the summer of 1964 in New York City. Former crew members who are interested may write to Richard M. Schultz, 961 East 5th St., Winona, Minn.
- USS *Jerauld* (APA 174)—A reunion is planned for those who served on board during World War II. For more details, write to Frank G. Sienkiewicz, 1270 Decatur St., Brooklyn 7, N. Y.

Anybody Remember DD5?

Sir: Many years ago (back in 1915) I served in the Asiatic Station on board the old *Decatur*, a coal-burning, four-stacker destroyer.

The destroyer division of which *Decatur* was a member was comprised of the five oldest DDs in the Navy at the time. I believe the ships were numbered one through five. The division flagboat was *Dale*. The other four were *Barry*, *Bainbridge*, *Chauncey*, and my ship, of course, *Decatur*.

We didn't paint numbers on the bows until April 1917 when we entered World War I. I don't recall which numbers were assigned to the ships. Do you have that information? Also, could you review the histories of ships named *Decatur*?

In July 1961 I celebrated 50 years in the Navy, including time on the barnacle list.—J. R. Johnson, CWO, USN (Ret.).

- *Congratulations on your first half-century in the Navy. It's always a treat to hear from long-timers who have first-hand information on the old Navy.*

The numbers of the destroyers in your old DesDiv were as follows: Bainbridge *(DD 1),* Barry *(DD 2),* Chauncey *(DD 3),* Dale *(DD 4) and* Decatur *(DD 5).*

Having served on board the old Decatur *(second of the Fleet so named) you probably know as much about her as anyone. But, since you asked, here's a review of her history, and the histories of the three other ships named* Decatur:

The man after whom the four ships were named—Commodore Stephen Decatur—was born at Sinepuxent, Maryland, in 1779 and, at the age of 19, received a midshipman's warrant. He made his first cruise in the frigate United States. *At age 25 Decatur received a captain's commission and was given command of* Constitution. *From November 1815 until his death in March 1820 the Commodore served on the Board of Navy Commissioners.*

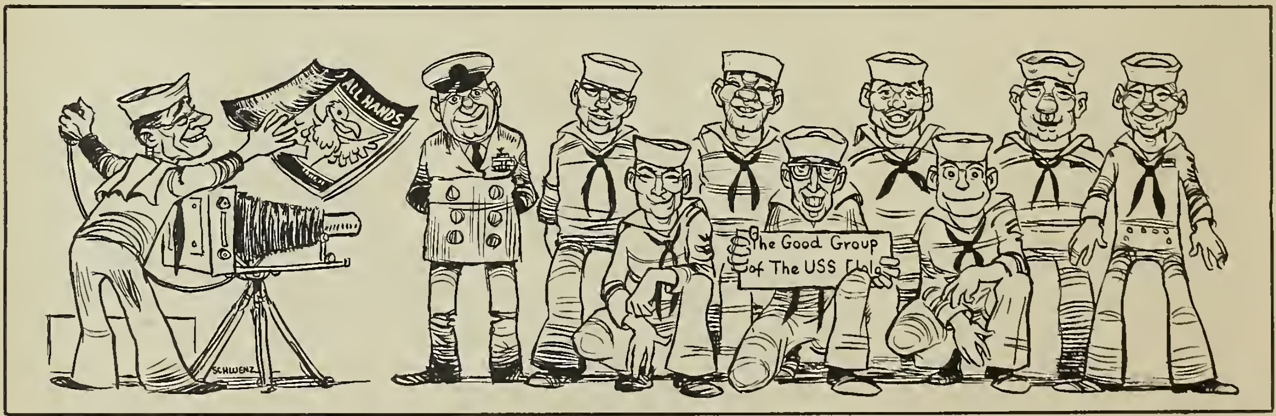
The first ship named Decatur *was a 566-ton sloop-of-war, built in New York about 1839. She was 117 feet in length, her beam measured 32 feet, and she carried 16 guns. The ship's speed was recorded as 11 knots. She had a complement of 150 men.*

Decatur's *first cruise was with the Brazil Squadron. She later served with the African Squadron and with the Home Squadron under Commodore Foxhall A. Parker.*

In 1852 Decatur *was taken out of commission for extensive repairs, then, the following year, was recommissioned and assigned to a special squadron charged with guarding the fishing interests of the U. S. in North Atlantic waters.*

In 1854 Decatur *joined the Pacific Squadron. She was decommissioned in June 1859. At the Mare Island, Calif., Navy Yard in 1865,* Decatur *was auctioned off for $5600 in gold.*

The second Decatur*—Torpedo Boat Destroyer 5—was the ship in which you served. This* Decatur *was built in Richmond, Va., and launched on 26 Sep 1900. She measured 250 feet in length and 23½ feet at her extreme breadth.* Decatur *displaced (normal) 420 tons, had a complement of four officers and 69 enlisted men, and carried two long 18-inch Whitehead torpedo tubes and*


ALL HANDS
The Good Group of The USS
SCHWENZ

WATCH THE BIRDIE — Focus on the fact that nine other shipmates are waiting to snap up ALL HANDS.

two 3-inch and five 6-pounder guns. Her trial speed was recorded as 29 knots. The ship was first commissioned at Norfolk, Va., on 19 May 1902.

Until 1917 Decatur *served in the Far East with the Asiatic Fleet. Her most frequent base of operations was Cavite, Philippines.*

In October 1917 the destroyer arrived in Gibraltar for duty with the U. S. Patrol Squadrons. Throughout the war she performed patrol and convoy duties in the Atlantic and Mediterranean area. (On 9 Nov 1918 Decatur *and* HMS Defender *were escorting* HMS Britannia *when the latter was torpedoed by an enemy sub.)*

Decatur *was taken out of commission at Philadelphia, Pa., on 20 Jun 1919. Her name was stricken from the Navy list in September 1919.*

The third Decatur *(DD 341), constructed at Mare Island, Calif., was commissioned in August 1922.*

From September 1923 to February 1937 Decatur *was chiefly engaged in operations along the western seaboard, interspersed by Fleet maneuvers in the Caribbean. She made a cruise to Australia in 1925, visiting Samoa and New Zealand en route. Hawaii was a frequent port of call.*

In 1937 Decatur *reported for duty with Destroyer Squadron 10 at Norfolk, Va. Until September 1941 she engaged in midshipman and Naval Reserve training cruises off the east coast, and conducted neutrality patrols as a unit of Destroyer Squadron 27.*

During the first two years of World War II, Decatur *served as an escort ship and performed convoy duties off the eastern coast of the United States.*

Beginning in November 1943 she engaged in antisubmarine and convoy work in the Atlantic.

The third Decatur *was taken out of commission at Philadelphia in July 1945. She was sold for scrap several months later.*

The fourth Decatur *(DD 936) is of the more recent* Forrest Sherman *class. She was constructed at Quincy, Mass., and commissioned at Boston in December 1956. The ship is 418½ feet in length and measures 45 feet at the extreme beam. She carries 22 officers and 289 enlisted men.*

Today's Decatur *is active in the Atlantic Fleet. She's the flagship of Destroyer Squadron 20, which is based in Newport, R. I.*—Ed.

Hashmark for Ship's 'E'

Sir: This is the first letter I have written to an editor and I regret it must be for the purpose of taking All Hands to task.

On page 25 of your March issue, the answer to a letter to the editor headed "Right or Left Hashmarks?" stated the hashmark under a ship's "E" should slant from upper right to lower left. *BuShips Manual* Article 19.154-5 was cited as authority.

This manual was superseded in 1959 by the *BuShips Technical Manual* which indirectly refers to the direction of the slant in article 19-154(5) stating that the hashmark should slant from upper left to lower right as the signalman maintained in the letter you published in March.—O.H.W., LCDR, USN.

• All Hands *was correct in essence, but the source should have been given as "BuShips Technical Manual" dated 15 April 1959 as revised 15 July 1961 and subsequent revisions.*

The correct slant for the hashmark under a ship's "E" is as we described it in the March issue.

Hashmark painters and others would probably be interested in reading an article on the subject on page 36 of the March 1961 "BuShips Journal."—Ed.

Claims for 2100-Tonners

Sir: At present I serve in Destroyer Squadron 21, which consists of the following *Fletcher*-class 2100-ton (standard displacement) DDs: *Gregory* (DD 802), *Mullany* (DD 528), *Uhlmann* (DD 687), *McDermut* (DD 677), *Braine* (DD 630), *Ingersoll* (DD 652), *Cogswell* (DD 651) and *Stoddard* (DD 566).

I am certain this is the only squadron of 2100-tonners on the West Coast, and am fairly certain there are no such squadrons on the East Coast. If this is true, DesRon 21 is the last all-2100 squadron.

After some research on this subject, I've come up with an indication that DesRon 21 was also the first squadron of 2100-ton DDs—formed during the Solomon Islands campaign of World War II—made up of the then brand-new *Fletcher*-class DDs.

Can you verify that DesRon 21 was the first—and is now the last—2100-ton DesRon?

Also, can you explain why *Gregory*, our squadron flagship, has such a high hull number? Many of the 2250-ton destroyers, launched a year after *Gregory*, carry numbers in the 700s.

I'd like to add that I, and many other destroyermen, believe that pound for pound, and for the job they were built to do, the 2100-ton DDs were the greatest all-around fighting ships the Navy has ever had. I'm not trying to start a controversy, just stating an opinion. Those still in service are doing a fine job on patrols, with antisubmarine warfare, carrier plane guarding, etc.

Speaking of good work, I have often marveled at the job your research staff does in digging up information on ships, past and present.—A.B., YNCS, USN.

• *First, thanks for the kind words.* All Hands *researchers receive plenty of brickbats; an occasional bouquet is a welcome contrast.*

TAKING STATION — The destroyer USS Trathen (DD 530) manuevers into position to be refueled at sea.

Next (we hate to disappoint you, friend), your DesRon *21 is not the last all-2100 squadron.* DesRon *28 on the East Coast is comprised of the following* Fletcher-*class ships (all former ASW destroyers): Waller (DD 466),* Conway *(DD 507),* Cony *(DD 508),* Bearss *(DD 654),* Eaton *(DD 510),* Bache *(DD 470),* Beale *(DD 471) and* Murray *(DD 576).*

Furthermore, we doubt that DesRon *21 was the first squadron of 2100-tonners.* DesRon *21 was not activated until 10 Mar 1943, while 24 ships of the* Fletcher-*class were commissioned in 1942.* USS Nicholas *(DD 449) was the squadron's first flagship, and eight other* Fletcher *types, which had appeared in Fleet organization listings as far back as August 1942, rounded out the* DesRon.

*The comparatively high hull number of your squadron flagship (*Gregory, *DD 802), is easily explained. When she was under construction, DD hull numbers were assigned to particular building yards without regard to the chronological hull sequence of class.*

The Fletchers, *which appeared in 1942, were the heavyweights among U.S. DDs until the appearance of the* Allen M. Sumner *class (standard displacement: 2200 tons). The first of the* Sumners *was* Barton *(DD 722), commissioned in 1943. At the time, several other classes, including some 1600-tonners, were under construction at various yards.*

Therefore, the Fletcher-*class hull numbers are interspersed among segments of numbers running from the 400s to 800s, intervened by hull numbers of ships of the* Benson, Gleaves, Sumner *and* Gearing *classes, all of which were under construction or planned for construction by the Navy during the same period.*—Ed.

TAFFRAIL TALK

Normally a departing shipmate gets a "well done," a firm handshake all around, and half-hearted admonitions to write if he finds time. People come and people go, in the Navy—and mostly, it's probably just as well.

We've been shaken to our very keel, however, by a recent much-more-than-normal loss. Chief Journalist Erwin A. Sharp, USN, writer, bowler, star softball catcher (and team captain), and all-around great guy has departed these shores for a tour of duty with the Naval Security Group, Kamiseya, Japan.

There are thousands of things we could say (most of them good) about Chief Sharp's tremendous work for ALL HANDS and all hands over the past four years, but it would take up a good share of this issue to list them all. We'll sum it up, here, by saying that he's missed—and badly.

Filling Chief Sharp's news desk slot will be a far from easy assignment, but the young man who's reported in to take a crack at it is not the type to scare easily.

Journalist second class Jim Lewis has been a Navyman a bare three years, but he's been around. During a just-concluded two-year stint with the staffs of Commander Seventh Fleet and Commander Cruiser-Destroyer Flotilla Nine, the Wheaton, Mo., native and ex-U. of Arkansas student logged WestPac sea duty time on board the heavy cruisers USS *Los Angeles* (CA 135), and *Saint Paul* (CA 73), the guided missile cruisers *Providence* (CLG 6), *Oklahoma City* (CLG 5), and *Topeka* (CLG 8), and the radar picket destroyer *McKean* (DDR 784.)

★ ★ ★

Effective naval leadership is a great art—and nowhere is it more important than in boot camp, where every day thousands of raw recruits are getting the training, and example, which in so large a measure determine how effective a group of sailors they will be in the future.

Most of this leadership is provided by the Company Commander. One of the top CCs we've heard about recently is Senior Chief Ship's Serviceman Roy Stephens, USN, currently serving his third tour as a "boot pusher" at RTC Great Lakes, Ill.

During his two previous tours—1949-52 and 1954-57—and including his present stint, Senior Chief Stephens has graduated a total of 23 companies. Twenty of them have won highest honors.

It all adds up to a total of more than 3000 Navymen who have received their initial training under the chief—enough to man an aircraft carrier, or 30 submarines. And, as Stephens-trained men, the odds are good that most of them are the type of sailors any submarine skipper or aircraft carrier CO would be more than happy to have in his crew.

ALL HANDS' hat is off to Senior Chief Stephens—and to all of his hard-working fellow company commanders, who are doing such a splendid job.

★ ★ ★

RADM D. F. Smith, Jr., USN, Chief of Information, sent us a memo saying that he liked our July front cover. CHINFO led off, and we've heard from others. The picture was painted by our staff artist, Fontaine Maury Sneed. Glad you liked it.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Information Bulletin, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau should be kept informed of changes in the number of copies required.

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• AT RIGHT: A NEW ONE — The guided missile destroyer *Goldsborough* (DDG 20) gets her feel of water following launching ceremonies at Seattle, Wash. The new destroyer, launched in 1961, is slated to join the Fleet in July of 1963. ➧

20

1902 – 1962

SIXTY YEARS of DESTROYERS

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

OCTOBER 1962 Nav-Pers-O NUMBER 549

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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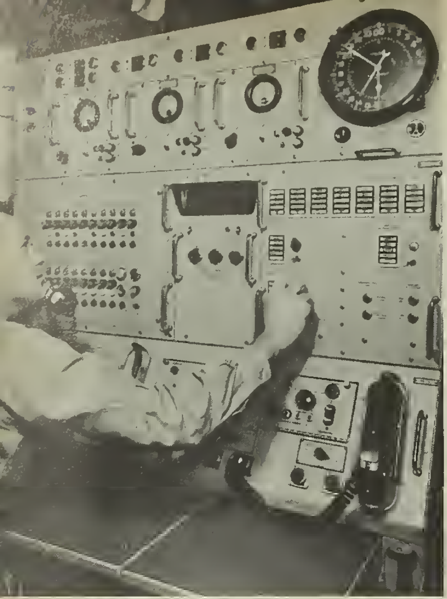
CDR F. C. Huntley, USNR, Editor
John A. Oudine, Managing Editor
Associate Editors
G. Vern Blasdell, News
Jerry Wolff, Research
Don Addor, Layout & Art
French Crawford Smith, Reserve

• **FRONT COVER: MISSILE MISS** — *USS Galveston* (CLG 3) passes through the Panama Canal en route to her new home port in San Diego. During two days of open house at Balboa, C. Z., she was visited by more than 4000 guests.

• **AT LEFT: GRAND OLD LADY** — Mothballed battleship *USS New Jersey* (BB 62) gets under way from her berth at Bayonne, N. J., for a two-day 'cruise' under tow of three tugs to her new home with Atlantic Reserve Fleet Group in Philadelphia.

• **CREDIT:** All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

Navy Bird



H. L. Wilcox, ETCS, USN

CHECKING — Team members check instrumentation that will record sub's reactions during *Polaris* firing.

E. F. Whitlatch, ET1, USN

TAKE A SUBMARINE cruising along beneath the surface of the ocean, launch a ballistic missile from it with the intent of hitting a specific point some 1200 to 1500 nautical miles away, and—something goes wrong.

Now, find out what happened and why.

T/I will help find the answer for you. That terms stands for "test instrumentation." In this age of the missile, the art of instrumentation is as difficult and almost as important as the art of missilery itself.

Every time a missile is fired at Cape Canaveral it carries an exercise warhead jampacked with equipment which beams missile behavior data to the various tracking stations along its flight path.

Scientists and engineers study these records to find flaws so they can make corrections in the following tests, and ultimately provide workable and reliable missiles.

Polaris is one of the most thoroughly tested missiles in our arsenal today. Well over 100 flight tests of *Polaris* have been conducted since the first was sent skyward in September 1958.

THE EXTENSIVE TESTING program put the 1200-nautical-mile-range *Polaris A-1* on station almost three years ahead of the original schedule, and put the 1500-mile range *Polaris A-2* on station less than two years later. Further tests are planned so the third generation 2500-mile *Polaris A-3* can be on the line by the middle of 1964.

These flight tests are of various levels of intricacy, but when the *Polaris* missile is mated to the FBM submarine, the acid tests are made.

Each FBM submarine goes through a Systems Development Analysis Program (SDAP) before it heads out on operational patrol.

Both crews (Blue and Gold) are required to complete successful missile launches before the submarine gets the stamp of approval from the Navy's Special Projects Office and is turned over to the Fleet.

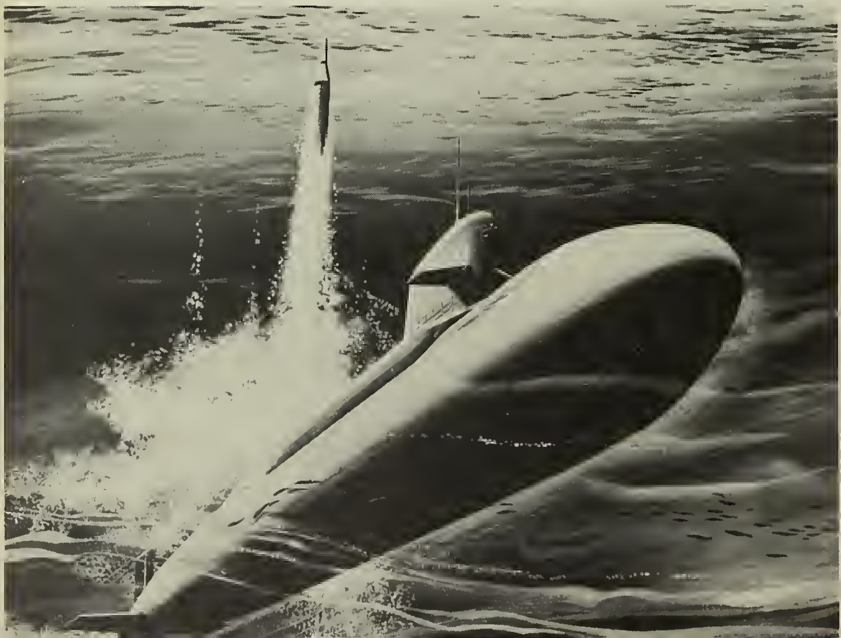
If the missile is launched, ignites when it is supposed to, follows its intended range and comes in on target, the team is a winner.

But if there's trouble, it must be found and eliminated.

As far as the missile is concerned, *Polaris* offers much the same problems as any other missile when it comes to obtaining and analyzing flight information.

However, analysis of the performance of the submarine is just as important. For this, the Navy has come up with a small group of Navymen who maintain and operate gear used to monitor the ship's performance.

SUB SUBJECT — Navy's Test Instrumentation Team checks FBM submarines.



KNOWN AS THE Test Instrumentation Team, these men have the job of gathering data during submarine operations at the Cape.

In general, the team operates the electronic and photographic equipment which records the behavior of the submarine and its various subsystems during a test launch.

In addition, they monitor the status of the missile itself while it is still in the launch tube.

As presently constituted the team has two officers and 38 enlisted men. The officer in charge, LT Edward J. Augustyniak, USN, and his assistant, LTJG William E. Clifton, USN, are both LDOs.

By rating, the group breaks down into 23 electronic technicians, six missile technicians, two fire control technicians, three photographers' mates, two quartermasters, one yeoman and one machinist's mate.

The enlisted group contains 13

Watchers

chiefs and only four seamen. Three of the four seamen have been ticketed for third class, so the Indian ranks are almost depleted. This doesn't make too much difference since the heavy labor is an all hands evolution.

The group has been involved in the *Polaris* program since mid-1959. At that time the first two FBM submarines, USS *George Washington* (SSBN 598) and USS *Patrick Henry* (SSBN 599), were nearing completion at Groton, Conn., and the flight test program on *Polaris A-1* was moving right along.

To learn something of what they were about to do, orders were issued for two small groups of men to attend special two-month courses at Anaheim, Calif.

The million-dollar equipment they learned to operate and maintain is designed and constructed in modules, each roughly the size of a portable TV set.

Built to stand up under rough treatment, the equipment is installed at the shipyards and taken off when the submarines have completed their tests at the Cape.

When installed, the modules are set up in stacks about six feet high and the stacks are arranged in complexes. Each complex monitors a major subsystem.

In operation the equipment monitors the submarine's launch, fire control and navigation systems, records the ship's own functions, provides time-of-day signals as a common reference for all events, records missile data, and provides radio links between the sub and the range instrumentation ship.

In addition, specially designed automatic cameras provide visual proof that what is being recorded by the rest of the instrumentation system is actually happening when it is supposed to. In effect, the cameras provide a check on the check.

Motion picture cameras mounted on the outside missile deck are also operated by the T/I team.

The major array of instrumentation gear is set up in the center level of the missile compartment, known as Sherwood Forest. The launch and telemetry complexes are located here, and the supervisor's console is sandwiched between them.

When the gear is offloaded from this space the submarines turn it into crew's berthing and shop and stowage space.

The fire control complex is fitted in a corner of the missile control center on the lower level, and the navigation recording equipment is located in the ship's control center.

Three types of records are used to store the information; tape, oscillograph and brush. Magnetic tape is about the same as that used on the common variety of recorders, though the reels are much bigger and wider. Oscillographs make use of a light beam hitting photosensitive paper, and a brush recorder is, in effect, pen and ink on paper.

After the two-month cram courses working with this gear at Anaheim, the men shepherded two sets of the newly developed equipment across country to install it on *George Washington* and *Patrick Henry*.

After they had installed and checked out the gear most of the crew flew down to Cape Canaveral, while part of it remained behind and rode the ships south.

At the Cape the men were attached to the Naval Ordnance

TEAMING UP — Photos show *Polaris*' under-water wake and surface flight.

FINAL EXAMS — *USS Ethan Allen* (SSBN 608) heads for SDAP to test her missile muscles before joining Fleet.

Test Unit (NOTU) at Patrick Air Force Base. This became the crew's permanent home.

The team set up shop in a cinderblock building at Port Canaveral, where the FBM submarines come in to load test missiles and conduct pierside tests. The port is located just outside the Cape itself, and is about 15 miles from Patrick.

Since the group as a whole is fairly senior, and housing in the area is allotted on that basis, finding housing was not a difficult problem. Most of the married men are living in high-standard Capehart housing. The single men live in the Navy section of an air-conditioned barracks.

Only two things keep their duty from being ideal shore duty. They spend as much time on the submarines as they do at home, and the hours are long.

When an FBM submarine is in for SDAP tests the team has a fairly simple work order of the day—three eight-hour shifts, seven days a week.

When two submarines are in at the same time (and this will happen more and more as the *Polaris* fleet grows) it becomes even simpler—12 hours a day, seven days a week.

In addition to their work when the subs are in, the T/I team is responsible for refurbishing the instrumentation gear and shipping it to various yards where new construction is coming along. The job of installing the gear has been turned over to the manufacturers.

Maintenance work on the equipment provides the team with a normal work week during the few periods when submarines are not in. An accelerated shipbuilding schedule will soon start turning the subs out at the rate of one per month, so this will pretty well eliminate the rest periods.

Just to make sure no one runs out of things to do, there are several other requirements laid on team members individually.

They attend special schools from time to time in addition to conducting their own courses for new members. Some of them are back at Anaheim right now studying the insides of a new instrumentation system which will be used on the larger 616-class submarines.

Whenever a new sub is about ready for sea, five members of the T/I team are sent to inspect the gear for the Navy before acceptance. Two of them ride the ship back to the Cape to trouble-shoot the equipment and make sure it is ready to operate on arrival.

The best way to describe what the team does is to join it on a launch day.

This leaves out the round-the-clock work required every day a sub is at the port which, in effect, consists of dry runs for the big day of launching.

A few months back USS *Sam Houston* (SSBN 609) was at the Cape and her Blue crew had already gone through its paces.

Now, after days of drill, it was the Gold crew's turn.

Sam Houston got underway at 0500, so it was a 0300 reveille for the T/I team members who have to be on board 45 minutes ahead of sailing time and have quite a distance to travel.

The entire T/I team is involved with every submarine, but it is the practice to assign a specific section for each submarine crew in its at-sea operations.

Both of the team's officers were on board this time, though LT Augustyniak had just returned from the Pacific where he and two other members of the team, Leroy M. Peterson, ETCA(SS) and James A. Randall, ETN3, had been on USS *Ethan Allen* (SSNB 608) when she successfully fired a live *Polaris* missile as part of the U. S. atomic tests in the vicinity of Christmas Island.

James M. Jones, MTCA(SS), was the day's instrumentation supervisor and the men in his section were Rolfe B. Dean, MT1(SS); Ernest F. Whitlatch, ET1; Oscar W. David, MTSN; Thomas A. Meek, ET1(SS); Edwin L. Ramey, ET1; Larry W. Beam, FTGSN; Newell C. Hayes, ET1; and

TIME FOR LAUNCH — Skilled hands man batteries of complex testing gear as sub prepares for missile firing.

R. D. Fulghum, MTSN, USN
O. W. David, MTSN, USN

R. B. Dean, MT1(SS), USN

E. L. Ramey, ET1, USN

Robert D. Fulghum, MTSN.

Four other team members whose jobs are primarily concerned with launch operations were also along.

Eugene E. Allen, MMCA, the team's jack-of-all-trades, was on board and spent the whole day operating a special trailing buoy used for telemetry and communications during SDAP only.

Donald E. Gerdus, PHC, and Randleson L. Lyles, PH3, were on board to load and check the cameras. These two had solved the early rising problem by bedding down the night before in sleeping bags on the missile deck of the submarine.

Roy F. Bronzovich, QMCA, operated throughout the day in the navigation center, where the instrumentation gear monitors the ship's SINS.

As soon as the members of the team got aboard they began tuning up the equipment to get ready for the countdown. The countdown was to start when the ship got underway.

LTJG Clifton and Chief Jones took up stations at the supervisor's console where they could exercise control over the complete instrumentation system.

With sound-powered phones LTJG Clifton was hooked into the ship's system and Chief Jones with the rest of the T/I team.

Meek, Hayes and Beam were stationed at the launch complex, Witlatch, David and Fulghum operated the telemetry setup, and Ramey and Hayes were down in the missile control center operating the fire control instrumentation complex.

After everything was set up and operating the men took off in turns to eat a quick breakfast.

While the T/I team was going about its job, the submarine crew was going about the business of launching their *Polaris* missiles.

The whole purpose of the day's events was to prove that the submarine, and in this case the Gold crew, could perform the mission assigned —launch a missile and hit a target while submerged.

Originally T-time was set for noon, but 1200 came and went long before the day's work was over.

Holds in a missile countdown come for many reasons. A countdown under test conditions is much more complicated than in an actual tactical situation. Range requirements for telemetry and destruct capability are stringent.

Sometimes a delay is necessary because a merchant ship or fishing boat has sailed into the firing area and "fouled" the range.

Whatever the reasons, it seems to be a standing joke to blame it on the instrumentation team, but they take it in stride.

Before the day was over T-time was 2230.

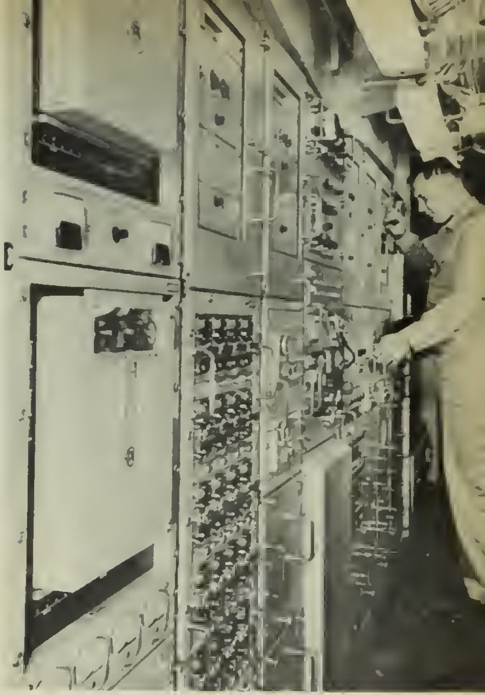
Sam Houston's Gold crew had proved it knew how to fire a missile and the ship was ready to take its place in the Fleet. The Gold crew's job was done for a while and they could look forward to the relative calm of their first patrol after months of straining to get ready.

Before the ship got back into port, the T/I team had completely dismantled the equipment and had it ready for offloading.

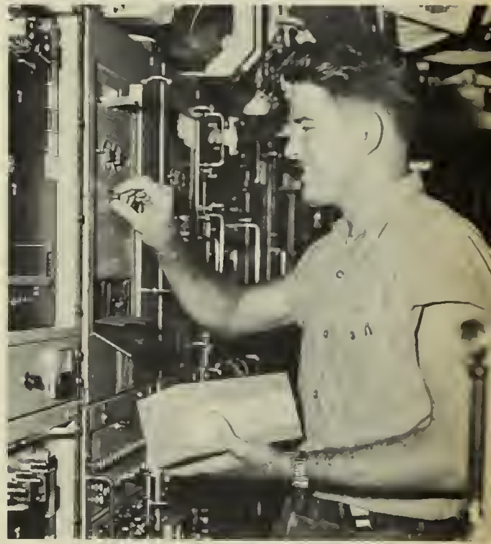
At the pier the rest of the team was standing by to give a hand in getting the gear off the ship.

When dawn broke *Sam Houston* slipped out of port. She sailed right past USS *Thomas A. Edison* (SSBN 610) where the Test Instrumentation Team was back to three shifts a day, seven days a week.

— John Scholzen, JOCS, USN.



EXTRA GEAR — Modules of testing equipment are readied aboard *USS George Washington* (SSBN 598) and (below) *USS Sam Houston* (SSBN 609).



L. W. Beam, FTGSN, USN

FOR THE RECORD — Telemetering team records action with electronic devices and cameras installed for the event.

LTJG W. E. Clifton, USN

R. L. Lyles, PH3, USN

LT E. J. Augustyniak, USN

LONG SHOTS — MCB-6 Seabees fire on rifle range as Marine instructor gets telescopic view of target.

Seabees Review the Art

EVERYONE KNOWS the Seabees are tough and versatile. These qualities made them legendary during World War II and they have maintained their reputation since.

Living up to a reputation usually isn't easy. It takes hard work, ingenuity and organization. Here's how the Seabee's Mobile Construction Battalion Six does it.

Earlier this year, MCB-6 finished six weeks of training at Camp Lejeune, N. C., which was designed to improve Seabee effectiveness in limited war situations.

To achieve this aim, MCB-6 plucked inactive Seabees from civilian life and integrated them into the military training program of the active duty mobile construction unit. In this way, observers could see how Reserves and Regulars functioned as one unit.

The program lasted only two weeks for the Reserves. The first was occupied with qualifying on the M-1. During the second week, they took part in infantry exercises.

TO BECOME PROFICIENT with a rifle, the Seabees, both Reserve and Regular, spent their time kneeling, squatting, sitting, or lying on their bellies out on the firing range, learning the technique of shooting which, for many, was a completely new experience.

They fired 60 rounds for a possible score of 300. If they scored 220, they qualified. A score of 270 earned them the expert badge.

A bull's-eye rated five points with diminishing returns of one point on each of the other three circles.

STIFF ARM — Seabee approaches bayonet machine handled by Marine.

They fired from distances of 200, 300 and 500 yards. At 500 yards, the bull's-eye looked like a tiny, fuzzy, moving dot.

A miniscule flinch of the trigger finger at that distance is often magnified enough to miss the target completely. When this happens, a red flag, derisively dubbed "Maggie's Drawers," pops up.

The second phase—infantry training, told the story of how the Reservists could be molded to become an integral part of an active Seabee battalion.

To the Reserves, as they ruefully massaged their aching muscles and washed away the mud, the final phase was known as groundwork. Groundwork started at dawn and ended at midnight.

Both Regulars and Reserves stormed the obstacle course as a single unit, crawling over, under and through barbed wire, running on logs over streams, climbing barriers and ropes, swinging across streams and jumping waterholes in which a goodly number got dunked.

The Reserves' two weeks of active duty for training ended with three problems: How to use the compass at night; techniques of fire at night; and individual movement at night.

AFTER THE RESERVES had gone home, the Regulars continued with individual combat lessons before entering specialized schools.

The lesson which earned the

SEABEES crawl under barbed wire.

# of War

AFTER DARK — Night firing by Seabee infantry platoon lights sky.

booby prize in the battalion popularity contest was the class on how to use a bayonet.

The teacher for this class was a boxing glove mounted on a two-by-four fist. It was backed up by a Marine.

The object of the game was to see whether the Marine could jab the Seabee with the boxing glove or whether the Seabee could duck its blows or ward off the glove with his bayonet.

The fourth and fifth weeks were spent at specialized schools learning the intricacies of the 3.5 rocket launcher, the 106 recoilless antitank rifle, the .30 light machine gun and the 81mm mortar.

There were also schools in field cooking, logistics, communications, NCO leadership, battalion staff and engineering.

ONE OF THE MORE UNUSUAL events during the school phase was a Marine demonstration of the HUS1 and the HR2S helicopters.

The HUS1 hovered over a stack of cargo wrapped in a sling while several Seabees hooked the sling to the plane's underside.

In a few seconds, the helicopter was waved away with its payload swinging beneath it. When the chopper reached the drop point, the cargo was lowered gently to the ground.

The HR2S helicopter can carry troops or vehicles in its interior, which is about the size of a large bus. During the exercise, the HR2S carried the battalion staff and two jeeps and a trailer.

The final examination was a combat problem. The premise: That MCB-6 was constructing a two-mile critical road on a southern European peninsula.

At a fork in the road, construction had to stop in favor of defending the junction against overwhelming odds.

When the shooting started, cooking facilities, ammunition supply and communications and command post tents were set up.

Since the command post and the communications tent were prime objectives for the enemy, they had to be camouflaged.

The fork in the road was used as a center with the main line of resistance (MLR) stretching in a perimeter about 500 yards in diameter. Two companies formed the MLR and a third was dug in behind for reserve strength.

Camouflaged men on the MLR were armed with M-1 rifles, Browning automatics and .30-cal. machine guns. They were placed on terrain which would make enemy penetration as difficult as possible.

The company in reserve was armed with 3.5 rocket launchers and 81mm mortars for defense against heavy artillery.

Meanwhile, back at the command post, the boss, with the assistance of his operations and intelligence officers, made the decisions based on information received by means of walkie-talkies, sound powered telephone and messenger runners.

The Seabees got the picture complete with scouting, drenching rains and aggressor attacks.

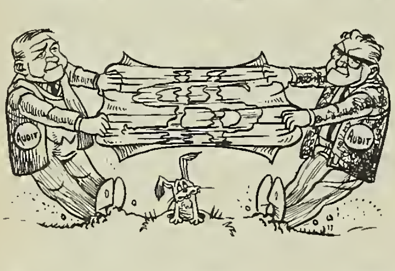
—Harry H. Larson, JOSN, USN.

EYES — HR2S helo is unloaded during exercise staged by Marines.

Taxpayer's Friend

Most navymen have, at one time or another, shaken themselves awake and steeled themselves against the onslaught of another late-late show.

If they have done this often enough, they will undoubtedly have seen the picture in which a group of steely-eyed auditors, wearing severe business suits, have marched into an office to be greeted with frozen smiles.



As they go about their work, it becomes increasingly evident that some trusted employee has been playing the horses with the company's cash.

The situation usually resolves itself in cataclysmic retribution.

Like most late-late shows, this one was pretty antique. Auditing was widely used in the 19th century to detect high jinks involving a company's finances and, for years, this was its primary purpose.

Today, however, this function is minor. When auditors from the Navy Comptroller's Office tackle what their professional lingo terms an internal audit, they concentrate on assisting Navy management in getting the most out of each dollar it spends. The benefits of their efforts touch not only management but every Navyman—in the form of increased facilities and lower taxes.

Many times, auditors don't arrive at an installation, they are there permanently and their audit is continuous. This is true of big installations, such as naval shipyards and large air stations. The auditors' job is to keep the long green stretched over as much territory as possible.

It is also the auditors' duty to see that management doesn't undertake a course of action that could lead to legal complications for the government.

A good example of this took place at a shipyard which, as you might suppose, was built on a river. When the shipyard property was bought, the deed located the yard's boundary at the shoreline.

Later, the shipyard management proposed erecting a number of buildings on land bordering the river but, after the auditors investigated the situation, the plans were dropped. The reason—a little detective work disclosed the land on which the buildings were to be erected was artificial. It was created by fill some years before.

The shipyard would, in effect, have been building on land belonging to someone else, inasmuch as the bank of the river had been altered since the deed was recorded.

Had the buildings been erected, legal action would undoubtedly have been brought against the government, and loss of the buildings could have been the result.

So why can't management find out these things itself, you ask. Properly speaking, auditing is an extension of management. It provides a service for management which, in effect, integrates the two.

Here are a few more instances in which management has been given an assist toward smoother operation and in which you, the taxpayer, have been saved money through the efforts of the auditor.

- A shipyard submitted plans and cost estimates for the purchase of new coal-burning equipment to replace similar equipment it had been using.

Auditors found that gas burners, while initially more expensive than coal burners, would cost considerably less to operate. Consequently, in the long run, they would be less expensive to the man who ultimately pays the bills, namely you.

- A naval station in Alaska used diesel fuel to produce heat and power. Auditors discovered that $25,000 would convert the plant to the use of Navy special fuel oil and result in an annual saving of $70,000.

- Vehicles operating in a terrain consisting almost entirely of loose sand were costing Uncle Sam a lot of money for repair. All, that is, except vehicles equipped with sand tires. Auditors recommended spending money to buy sand tires, thereby

saving a large amount on vehicle repair.

- Auditors even look into such unlikely subjects as trash and garbage. They made a survey of methods of waste disposal in an area in which there is a large concentration of naval installations, and found each installation had contracted for its own trash removal.

The auditors discovered that, if the Navy invested in trucks suitable for this job and hired enough men to take care of the entire area, the Navy would save several thousand dollars a year—even after buying the necessary trucks and paying the salaries of the men employed.

Sometimes an audit lays bare areas in which points of law must be clarified. Procedures are audited and found to vary over large areas, although all the procedures are found to be legal.

Diving pay is a good case in point here. There was a time when the law wasn't quite clear on what diving pay requirements really were. This resulted in a number of interpretations, none of which could actually be called incorrect.

A number of audits were made and the law was clarified. This resulted in more equitable distribution of diving pay under conditions which, for most Navy divers, were less stringent than those previously imposed by various commands because of unclear legal phrasing.

Skippers who bring their ships to the shipyard have reason to think kindly of auditors because they often make it possible for a ship to receive more for its repair dollar.

Here's how the Navy allots a portion of its appropriation to Navy shipyards for materiel, salaries and what-have-you. Captains of ships also receive a part of the appropriation to purchase repair services.

When the shipyard presents its bill to the captain, a big item is marked *overhead.* The captain has no way of knowing precisely what items go into *overhead.* He pays it.

The captain doesn't know, but the auditors can find out. When they find items charged to *overhead* which should be included elsewhere in the shipyard accounts, they recommend correction.

This, of course, is only a matter of bookkeeping, and saves the taxpayer no money whatsoever. However, it does reduce the captain's *overhead* bill, thus giving him more money to spend in areas where the Navy intended it to be spent. This often results in added comfort and safety features for you, the man who serves in the ship.

Sometimes an audit will have a direct, beneficial effect on a Navyman's pocketbook—like the time the auditors checked commissary store prices and found the commissary could avail itself of different sources of supply, which would reduce its operating costs. The savings were passed on to you, the consumer, in the form of lower prices.

In another instance, Navymen were directly benefited when the auditors found two almost neighboring messes operating at low standards. They combined the messes in a new building, and the result was better food served in a more efficient way to the Navymen who ate there.

All these examples are, to a greater or lesser degree, occasioned by the fact that the Navy is big. Because it is big, it sometimes needs to be pulled together so its left hand knows what its right hand is doing.

This can be illustrated by the case in which auditors discovered automotive equipment headed for the tropics was being equipped with heaters—for which the Navy, of course, was paying.

Since Navymen at this location have even less need for heaters than Eskimos have for refrigerators, the heaters were taken out upon the vehicles' arrival and stored in a local warehouse awaiting shipment to the United States, for which the Navy would again be billed. The situation was rectified.

Occasionally auditors are the causes of some very red faces. There was once a manufacturer who produced some JATO bottles for the Navy. They were delivered, and stored until the time came to fill them.

The Navy then returned the bottles to the same manufacturer for filling, and was later informed by the manufacturer that he could not fill the bottles because the knucklehead who made them didn't meet the required standards.

Confusion was difficult to hide when the manufacturer learned he had condemned his own bottles as

sub-standard and had to make good.

Internal audits are, so to speak, concerned with the Navy's own house and therefore have a more direct bearing on the lives of individual Navymen. They also save the taxpayer a considerable amount of cash. However, the big dollar savings are made by the men who, in auditorese, are called contract auditors.

These are the men who cope with such multi-million dollar projects as the building of ships, rockets and other hardware.

Standard items like a Navyman's black shoes or his white hat are bought by the Navy on a sealed bid basis. There are specifications to be met, and anyone who can meet them is invited to submit a bid.

The company which furnishes the lowest bid gets the contract. It's all very simple.

However, when the Navy starts looking around for a company which can produce a rocket, for instance, things are not so simple, and the auditors are called in before a contract is even given.

Let us say, for example, that the Navy is reasonably convinced Company X is capable of producing the necessary rockets.

Auditors examine the company's cost estimate for producing various components of the rocket and compare the estimate with records of the company's past performance on the same or similar work.

If they find the estimate to be out of line, they mention it in their report. Frequently, estimates are lowered as a result of these audits.

Auditors also delve into the labyrinthine recesses of subcontracts—that is, the manufacture of small parts which the prime contractor farms out to smaller companies.

Auditors learn whether or not these small manufacturers are capable, financially, of producing the part they have contracted to make.

After all, delivery on a high priority million dollar missile could be seriously delayed if the subcontractor of one solenoid went into bankruptcy before he could effect delivery.

Since the manufacturers who are able to produce terrifically complicated weapons for the Navy are something less than legion, there is usually a contract auditor right on the premises already.

If he is not a Navy auditor, he is an Army or Air Force auditor, for they all work together in things like this. The service which does the most business with a manufacturer is usually the one which has the auditor at the plant.

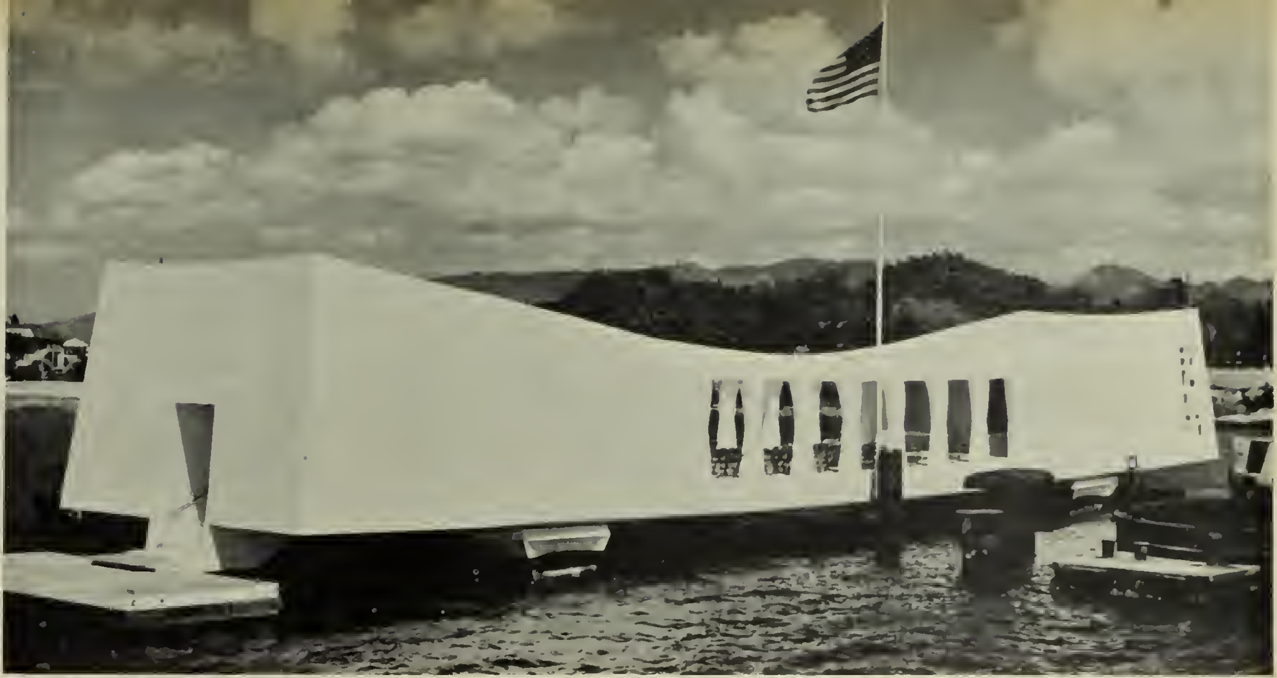
This must take a host of auditors, you say. It does take quite a few. However, the number of auditors required to do a good job is decreasing because of improved auditing methods. Even auditors are subject to improvement!

All in all, contract auditors examine about 60 per cent of all the money the Navy spends on materiel. When auditing expenses were toted up for last fiscal year, the Navy discovered contract auditors were responsible for a savings of 40 dollars for every dollar of auditing costs. During 1961, this amounted to a saving of 420 million dollars on 10 billion dollars examined.

As you can readily see, today's auditors help solve far-flung fiscal problems which management, because it is concerned with other specifics, may overlook.

There are numerous instances, too, in which management may be aware that irregularities exist and savings might be effected, but needs an agency capable of cutting across lines of authority and legal responsibility to straighten out a tangled situation.

Although their recommendations are primarily designed to help management, they incidentally make a winner out of every Navyman by paying him dividends in better service and helping him save his taxpaying dollar. — **Robert Neil**



NEW AT PEARL — USS *Arizona* Memorial looks like this from water level and (below) like this from the air.

Arizona Memorial

Visitors to Pearl Harbor are being treated to a brand new, and impressive, sight these days. Smack dab in the middle of Battleship Row, and suspended athwartships over the sunken USS *Arizona* (BB 39), is the gleaming white concrete and marble USS *Arizona* Memorial—a monument from a grateful nation to nearly 1200 of her most honored dead, and the culmination of a 20-year dream.

A fly-over by eight Marine Corps jet aircraft from MCAS Kaneohe marked the beginning of dedication ceremonies. Some 200 dignitaries and officials assembled inside the Memorial itself, while upwards of 700 other spectators gathered on nearby Ford Island.

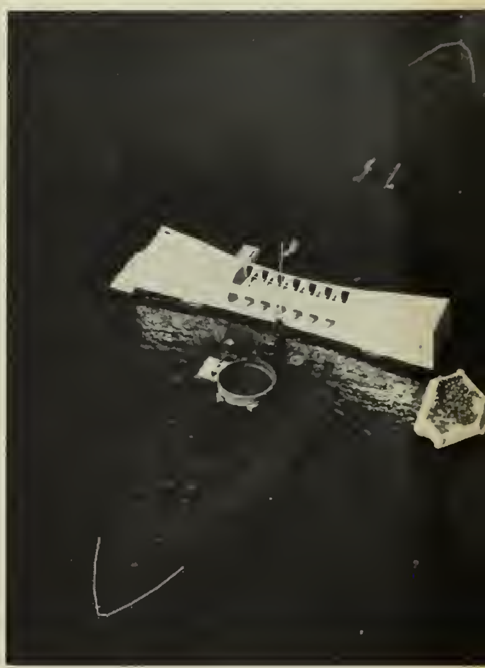
Eleven hundred and seventy-six *Arizona* crewmen went down with their ship on 7 Dec 1941, and the rusting hulk has served as their final resting place ever since that fateful day.

In tribute to her crew, the Navy has continued to carry *Arizona* on the rolls as an active, in-commission ship. Thus, each day since her end, the U. S. flag has been raised at 0800 and lowered over her at sunset, just as it is over every commissioned U. S. Navy ship.

The idea for a permanent memorial over *Arizona* was born even as the dust was still settling from the attack. Little could be done during wartime however, and it was not until 1946 that several groups were formed to help make the idea a reality. These groups began investigating ways to pay tribute to the victims of the Pearl Harbor attack and, indeed, to all the war's dead.

The completed memorial is an enclosed bridge, 184 feet long, and varying in width from 27 feet at the center to 36 feet at the ends. It is 14 feet high at the center and 21 feet at the ends. The supporting structure consists of two concrete girders weighing 250 tons each. They rest on 36 pre-stressed concrete piles.

A Navy shuttle boat service now takes visitors to the memorial. It runs six days a week, Tuesday through Sunday.



ON DECK — Memorial is suspended athwartships over the sunken BB 39.

Cat and Mouse at Play

RECENTLY THE SHIPS of DESFLOT Two departed Newport for a standard ASW exercise. This in itself is not necessarily noteworthy, for these ships and hundreds like them have been conducting such exercises for years. Nevertheless, it might be salutary for the rest of the Navy to know what they are up to—and up against. In a sense, this might be called a progress report.

At that time, included in DESFLOT Two were CORTRONS 10 and 14, consisting primarily of *Dealey*-class DEs. (Since that time, the two have been combined into a new CORTRON 10.) No matter what its designator, the purpose of an escort squadron is to provide protection for convoys. As a convoy's worst enemy is a submarine, a DE's basic purpose in life is to kill submarines. It can do it, too.

Although each exercise is more or less routine, each has a definite objective. In this instance, during the first week CORTRONS 10 and 14, each consisting of four DEs, were intent on sharpening their maneuvering techniques, developing improved formations, and giving their sonarmen practice in detecting subs. Their targets were the two submerged conventional submarines USS *Cavalla* (SS 244) and USS *Cutlass* (SS 478).

Although each ship and sub would appear to be steaming at random, they were not. Their every action for the two weeks in question was minutely regulated by a set of instructions of more than 100 pages, carefully compiled by RADM Louis A. Bryan, USN, Commander Destroyer Flotilla Two and Commander Task Group Charlie, and his staff.

DURING WORLD WAR II, because of shorter range of radar and sonar, the escorts stayed relatively close to their convoys. All would zigzag in unison, but this procedure frequently became so stereotyped that a reasonably good submariner could anticipate the next zig as well as the members of the convoy, and would thoughtfully place a torpedo where a merchant ship was going to be, not where she was.

Such tactics have changed considerably in the past 20 years. Earlier, on a clear day you could stand on the bridge and see almost every ship in the convoy as well as the escorting forces. Today, this is not necessarily true. Most of the time, even with a relatively small group such as the ships in this exercise, only one or two are faintly visible on the horizon. To all appearances, your ship is simply cruising along on a somewhat eccentric course, all by itself.

Today, the escort still stays between the convoy and the enemy, but at a greater distance. This is made possible by longer range sonar and radar and is desirable because of increased capabilities of weapons. As submarine tactics and weapons have improved, so have those of the escorts and their convoys.

AN EXERCISE such as this cannot, of course, be carried out with true wartime realism. The long hours of work, continual GQs, tension and broken sleep are there, but the knowledge that any mistake may be the last one is missing. For most men, shipboard routines such as chipping and painting, underway shipboard drills, plus lessons and study go on as usual, but for a few on the bridge, in CIC, sonar and communications, the feeling of the hunter and hunted is present.

This is known as a "controlled exercise." All is planned in advance. First, an operating area some 100 by 60 miles, about 180 miles from Norfolk, Va., is reserved. A "reservation" in this case applies to U. S. military surface ships, military aircraft and submarines. Navy ships not taking part in the exercise avoid the area but merchant ships can, and do, plow placidly along and, at times, completely disrupt a hot game of cat-and-mouse.

The operating area is further broken down into grids consisting of an attack zone, with buffer zones at either end (all carefully laid out in the set of instructions). The screening ships and the main body fall into formation in one of the buffer zones and start on a course through the attack zone.

In the attack zone, an area 20 by 30 miles, the sub can attack screen or main body as she elects. When the convoy and its screen safely reach the opposite buffer zone, they reform, the sub continues on into her buffer zone to the north, let us say, then turns and comes back south. Meanwhile, the convoy has turned and started back from *its* buffer zone. This is repeated until all hands become dizzy and the navigators are approaching the short-tempered stage.

KEEPING SHARP — Crew in pilot house of *USS Forrest Sherman* (DD 931) point up their shiphandling techniques during the anti-sub exercise.

WELL GUARDED GROUP — Convoys, like this one during WW II, are protected by hard hitting ASW experts.

During the first week, the two escort squadrons conducted their own private exercises and maneuvers, each sharpening techniques for the following week when they would be under the eye of the admiral and his relief, RADM Carlton B. Jones, USN. During the earlier part of the week, the respective commodores, CDR W. N. Homer, USN, of CortRon 14 and CDR F. E. McKenzie, USN, of CortRon 10, had occasional opportunity for a display of temperament at the antics of their respective squadrons, as they were getting in shape for the big test.

It was a tough assignment for the squadrons and their men. Not only were the ships working out details of new maneuvers to which they were expected to respond at a single command (the whole thing closely resembled a series of football plays with the commodore calling the signals), but they were also toying with a new concept of layer depth control developed by the Hydrographic Office.

On Friday, the two squadrons consisting of USS *Lester* (DE 1022), *Joseph K. Taussig* (DE 1030), *Hammerberg* (DE 1015), *Dealey* (DE 1006), *John Willis* (DE 1027), *Hartley* (DE 1029), *Van Voorhis* (DE 1028), *Courtney* (DE 1021) and *Cromwell* (DE 1014), were joined by *Forrest Sherman* (DD 931), the admiral's flagship, plus the Naval Reserve ships *Albert T. Harris* (DE 447), *Thaddeus Parker* (DE 369) and *Robert F. Keller* (DE 419), two oilers, *Kankakee* (AO 39), and *Chuckawan* (AO 100), and the

SUB HUNTING — Crew members stand by on board *USS Courtney* (DE 1021) as squadron stops sub attack. *Below: USS Van Voorhis* (DE 1028) joins hunt.

ESCORT squadron skipper, CDR W. N. Homer, USN, plans tactics from the bridge of his flagship.

TOPSIDE TEAM MATE — *Neptune* patrol plane from VP-26 works with DEs to help protect the convoy of service ships from attack of nuclear sub.

JUST IN CASE — Emergency steering is rigged during drill on USS *Courtney. Below:* Lookouts receive instructions on *Forrest Sherman.*

ammunition ship *Great Sitkin* (AE 17) which were to act as the convoy. They were joined by planes from Patrol Squadron 26 which, normally stationed in New Brunswick, Maine, were based at Norfolk for the purposes of the exercise. Their opponent was USS *Triton* (SSN 586), one of the more formidable of the nuclear subs.

After joining up, the monotonous pacing back and forth between buffer zone, attack zone, buffer zone, turning point and then repeat again and again continued. Now, however, there was a difference. The screening ships had a real convoy to protect and the two DE squadrons now needed refueling and replenishment. It was a good time to attack and *Triton* made the most of it.

Triton's objective was, of course, penetration of the screen into the main body where the oilers and ammunition ships were handicapped by their replenishment at sea lines to the DEs. It was still possible for them to maneuver but not as radically as if each ship were free. According to current doctrine, *Triton* was not too interested in the screening ships unless she was detected. (She was. The red X which indicates the enemy frequently appeared on the maneuvering board in CIC. When the screening ships would close in for the kill, *Triton* would simply fade away under a favorable layer depth. However, on this particular day, *Triton* didn't break through the screen, either.)

There were times during the week when *Triton* was permitted to penetrate the screen so the sonar operators could gain experience in spotting and tracking contacts. During these unopposed screen penetrations, *Triton* operated in and out of the screen of ships at will.

It might be mentioned here that at no time were any of the subs visible. There was a brief rumor aboard *Sherman* that one of the wing lookouts had spotted the sail of *Triton* about 10 miles distant but a check of the schedule showed that *Triton* could not possibly have been in that general area.

As a rule, the ships worked on their random patrol technique. Although each ship was assigned a definite area of the screen as her responsibility for protection, they did not follow a fixed pattern.

On the assumption that their sonar was effective through a given arc of their bow, the ships ranged at will within their assigned areas. If the layer depth and sonar conditions were not favorable, the screen would retreat into a tighter circle, always making sure that their sonars continued to overlap. If one were to sidle too far off to one side inadvertently, thus leaving a gap in the screen, it was the responsibility of the other ships to cover the hole.

If one of the screening ships were

to receive a sonar contact, the OOD would promptly get on the radio telephone and notify the officer in tactical command, then, still using the random patrol technique, inch toward the area to investigate. The tactical commander would order the other screening ships to close up the gap with, perhaps, the exception of one who would be ordered to assist the investigating ship as a backup.

Should the sub break through the screen, the screen would close in toward the main body in an attempt to flush the sub. Obviously, no sub is a match for a dozen or more fast-moving, well-armed DEs. When it became apparent that her opponents were closing in for the kill there was only one thing for the sub to do—tear out of there as fast as her engines would permit—thus living to attack again another day.

Should the defense operate perfectly, the only surface signs of activity would be an increase in the number of ships visible, each one wheeling and circling in apparent confusion. Then, the crisis over, the DEs would slip away to their assigned areas and you would be alone again.

In the CIC, however, it is possible to watch the circle become tighter and tighter about the red X. On very rare occasions, an eraser would wipe one of the attacking ships from the maneuvering board. The "sunk" ship would drop out of the circle for the time being, then when the attack was over, she would again resume her position. On equally rare occasions, even when the red X was *Triton*, one or more of the attacking ships would claim a kill. Then, in a dozen CIC rooms and on a dozen bridges, men would straighten up, grin, and give a deep sigh of relief.

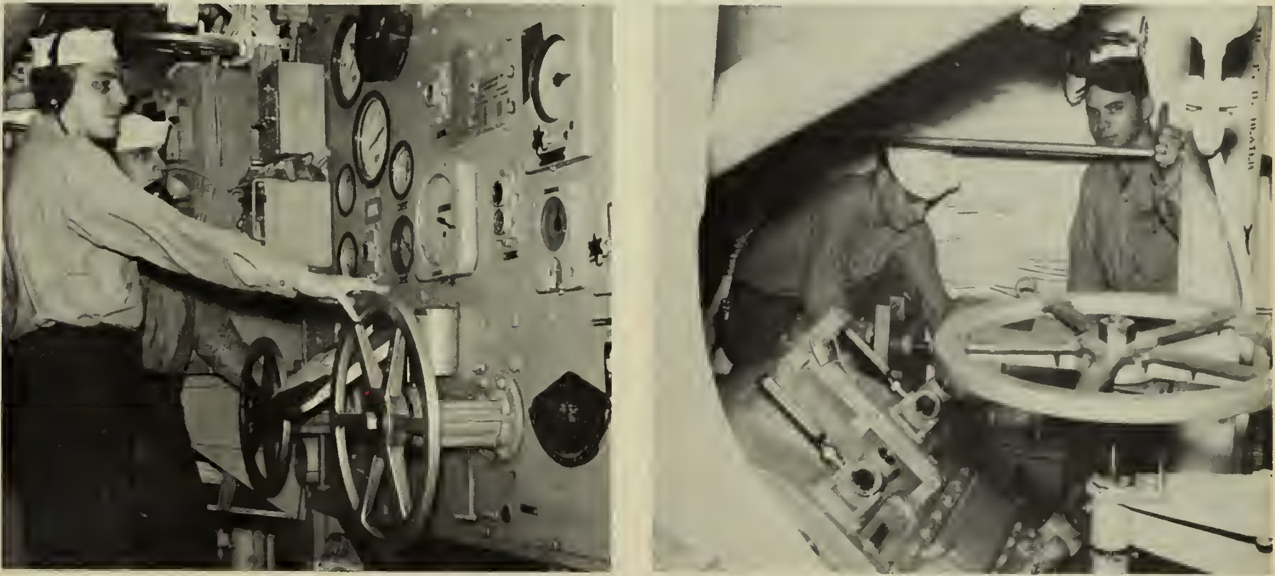
LOADED — USS *Lester* (DE 1022) pulls away from USS *Great Sitkin* (AE 17) after taking on ammunition to be used on extensive submarine hunt.

DEFINITE RULES for determining kills have been established. If the sub makes an approach without the screening ships detecting her, and succeeds in getting within torpedo firing range of her intended victim, she fires a green flare instead of the anticipated torpedo. That ship is "killed," and is then out of action. On the other hand, if a ship succeeds in getting off three rounds of any kind of weapon—depth charges (hand grenades), Minnie Mouse (Weapon ALFA) or torpedoes—within firing range, before the sub gets off her green flare, then the ship has sunk the sub. Both ships and subs were sunk during Transex, the exercise under description here.

When either weapon is fired from a DE, the results can be heard by the sub, who promptly gives the attacker an evaluation of its effectiveness. Strict honesty is the rule here, for it is understood that the entire exercise could be negated through unduly favorable shadings of opinion. If the sub has reason to believe the attack is successful, she candidly admits that she is out of action. It's all very sporting.

However, subjective opinion is not the final determinant. Flares and grenades may serve as a rough approximation of the success or failure of the respective combatants, but the final evaluation must wait until all hands return to Newport. There, the plots of each ship and sub are carefully compared with the claims made and only then is final judgment rendered. — **Erwin Sharp, JOC, USN.**

ACTION BELOW — Crewmen below decks were kept busy while their ships were protecting the convoy.



They Do the Hull Job

Less than forty years ago there were only a handful of divers in the Navy who were qualified to work at depths greater than 90 feet on underwater salvage missions.

Today, however, deepwater divers are plentiful and many are qualified to work at depths below 300 feet.

SPLASH — Navy diver enters the water to check ship's hull damage.

Several factors are responsible for this change. The submarine disasters of 1925 and 1926 pointed to the necessity of having Navy divers who were capable of descending to greater depths than were then considered safe.

Increased training in the Navy's diving school plus improved techniques devised by experimental diving units greatly increased divers' range and flexibility.

Today's Navy divers are qualified in Scuba (Self Contained Underwater Breathing Apparatus) and the standard "hard-hat" (Surface Supplied Air Apparatus) diving.

They do underwater demolition work, dispose of explosive underwater ordnance, do salvage diving and rescue Navymen from disabled submarines.

They also act as hull repairmen and inspection divers.

Much has been written concerning the feats of divers who detonate underwater weapons, salvage sunken ships and rescue men from submarines. However, little is known about the groups of men whose job it is to look up at a ship's hull from underwater and repair the defects they see there.

One such crew is on board the destroyer tender USS *Frontier* (AD 25). The team is made up of one first-class diver who is qualified to make dives up to 385 feet and four second-class divers who can work in depths up to 150 feet.

The men are assigned to regular shipboard billets but they spend much of their time underwater. In an average week, they inspect and do underwater repair work on the hulls and sonar domes of three ships.

A while back, the crew had the sizable task of repairing the propeller of USS *Mansfield* (DD 728) while *Mansfield* was alongside the tender.

Although repairing a propeller under water is not unusual for some ships, destroyers usually bring their propeller troubles into drydock because there is, more often than not, other damage which necessitates repair.

When underwater repair is feasible, the divers have a big job on their hands because of the tremendous weight of the propeller (in the neighborhood of seven tons) and the difficulty in getting the propeller off. Usually a pretty hefty explosive charge is needed to dislodge it.

Frontier's divers were submerged for more than 116 hours total time to repair the propeller on *Mansfield*.

Home for *Frontier*'s divers is the diving locker just aft of the forecastle on the main deck. Here the crew members do minor repair work on their gear and make whatever adjustments are necessary.

The diving locker also serves as an office and berthing compartment.

While working, the sub-sea-men use a 50-foot converted motor launch as a base. The boat is equipped with a compresser powered by a four-cylinder model "T" engine. This is their source of air supply.

The boat is rigged for most diving operations. It has a standard deep-sea diving suit and a two-way intercom which can be used by as many as three divers at a time.

Most of the crew's diving work is done in comparatively shallow water and can be done while wearing wet suits and shallow water masks.

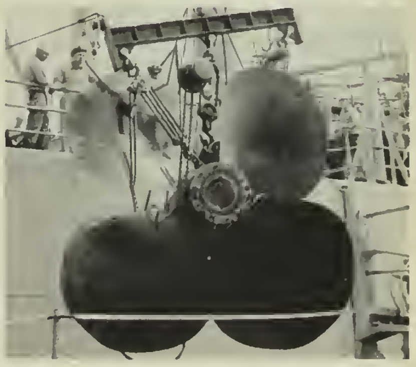
These are the working clothes in which they do most of their underwater welding, cutting and minor repairs such as installing hull zincs, fairwaters and doing a multitude of other underwater jobs.

WATER WORK — Navy diver in tank gets feel of using tools under water.

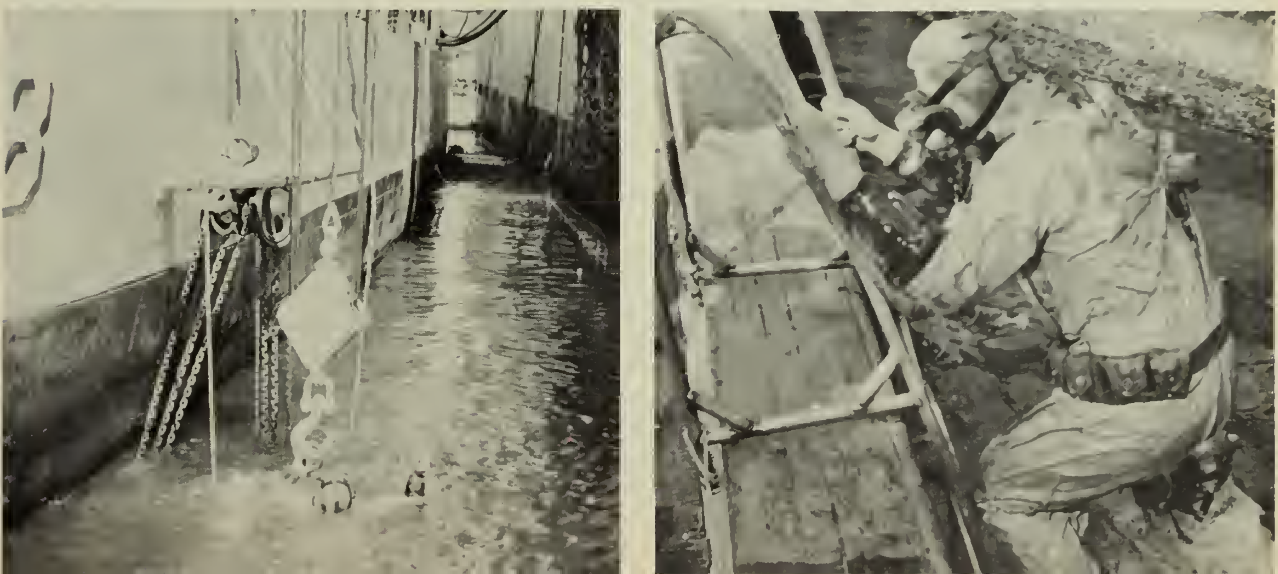
Hull zincs are, of course, pieces of zinc put on the hull to control the chemical reaction known as electrolysis caused by the effect of salt water on the various metals of which a ship is built. If they were not installed, deterioration of the ship's hull and struts would be hastened.

Fairwaters are installed around a ship's struts to prevent line from tangling in strut bearings. The fairwaters are made of fiberglass and are shaped like a soup bowl.

In case you are wondering how a crack or a hole can be repaired in



'HULL DIVERS' of USS *Frontier* (AD 25) work below to install propeller (above) on USS *Mansfield* (DD 728).



DOWN, BOY — Divers of *USS Ajax* (AR 6) repair prop. *Rt:* Divers head for bottom. *Below:* Student is suited up.

a ship's hull when the damage is underwater, the diver's answer is to place a cofferdam (a wooden box with a rubber gasket and putty) over the hole or crack.

The water is then removed from the box thus creating an air space between the damaged section and the water. The hull can then be patched from inside.

Diving isn't as easy as it looks on TV. Every diver has to understand diving physics, physiology, oceanography and water safety.

To an underwater man such two-and-a-half-dollar terms as air embolism, nitrogen narcosis and spontaneous pneumothorax are very important. Understanding them means the difference between returning safely to the surface or suffering a not-so-sudden, agonizing death.

Thanks to modern technology and training, Navy divers are well able to cope with the underwater problems which confront them.

Their equipment and knowledge give them a definite edge over the hardy underwater men who made history salvaging USS *S 51* and *S 4* when they sank back in 1925 and 1926.— **Dennis E. Aufranc, JO3, USN.**

DIVING SKILLS and techniques have come a long way since this class in 1918. *Rt:* Sub's hull is checked.

Boston at Barcelona

NAVYMEN IN SHIPS of the U. S. Sixth Fleet visit many interesting cities during their stay in the Mediterranean area. One such city visited earlier this year by the crew of USS *Boston* (CAG 1) is Barcelona, Spain.

With about 1,500,000 inhabitants, Barcelona is the largest and perhaps the most cosmopolitan city in Spain. Wide streets and beautiful boulevards permit traffic to move at a rapid pace and give one the feeling of being in one of the larger cities back in the States.

Finding something to do while in Barcelona is no problem. Aside from the many sights to be seen, adequate recreational facilities are also available. Among these are the opera, ballet, soccer, bullfights, jaialai, boxing and wrestling. In addition, there are tennis courts, riding stables, golf courses and a variety of night clubs.

Clockwise from top left: (1) A familiar sight to most Navymen visiting Barcelona, Spain, is this statue of Christopher Columbus which towers over the city near the harbor. (2) C. R. Witt, JO2, USN, and R. D. Puckett, AN, USN, of USS *Boston* (CAG 1) gag it up during a souvenir-shopping tour with a Spanish youth. (3) Orphans tour *Boston*'s main deck during a party. (4) C. R. Witt, JO2, USN, poses in the trunk of the stone mastodon in the city zoo at Barcelona. (5) A replica of Columbus' sailing ship, *Santa Maria*, is on display in Barcelona's harbor.

SWEEPS—Mine warfare students stream a hammer box, a noisemaking device that triggers acoustic mines.

Mining Their Own Business

Mine warfare, a field long cloaked in secrecy and shrouded in obscurity, has been more or less an unknown quantity to most Navymen in the past. Recent years, however, have brought increasing awareness that mine warfare—both the offensive and defensive variety—is particularly adapted to small, or so-called "limited war" conditions.

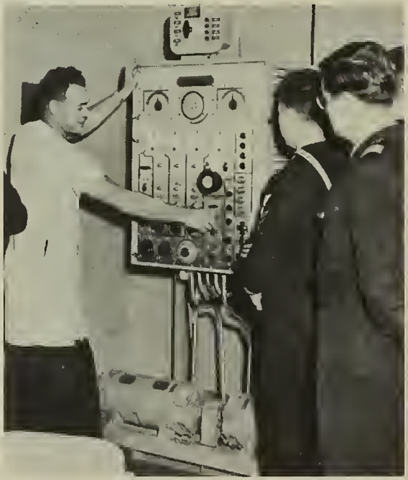
Now, when the Navy faces the necessity of being ready to handle any number of such limited war situations, mine warfare training is being given ever-increasing emphasis. More and more Navymen are being assigned to such training. And, officer or enlisted, if you're ticketed for a stint of mine warfare schooling, there's only one place for you to go. That's the U. S. Naval Schools, Mine Warfare, at Charleston, S. C.—the only one of its kind in the naval establishment.

NSMW's assigned mission is a good-sized mouthful, even for Navy officialese. It is:

"To train commissioned and enlisted personnel of the Navy, and such other persons as are authorized by the Chief of Naval Personnel under directives of the Chief of Naval Operations, in the material and operational details of defensive and offensive mine warfare, including mining, mines, designated mine location systems, mine countermeasures and degaussing, to the extent necessary to meet the needs of the Navy, and to train designated commissioned officers in the operation and administration of a minecraft engineering department."

Briefly, however, it means that NSMW teaches all phases of mine warfare, including minelaying, minesweeping, planning and tactics, and the use of surface, aviation and submarine mines.

CLASSY — Instructor points out ways of operating the automatic degaussing unit to mine students.



NSMW has taught such skills to more than 30,000 students since its commissioning in late 1940. The majority of these have been Navymen, but they have also included a goodly sprinkling of U. S. Army, Air Force and Marine Corps trainees, plus numerous representatives from 26 allied and friendly foreign nations as well.

During the first 19 years of its existence, NSMW was located on a 209-acre tract adjoining the Yorktown Battlefield Park at Yorktown, Va. Some three-and-a-half years ago, however, in the interests of efficiency, the school was moved to the Naval Base at Charleston. There, next door to the headquarters of Commander Mine Force, Atlantic Fleet, it is better able to work in close conjunction with the operating forces.

NSMW graduates were instrumental in the sinking or damaging of some two million tons of Japanese shipping by mines during World War II. In addition, NSMW-trained Navymen manned the minesweepers which spearheaded every allied invasion in both the European and Pacific theatres.

The lessons taught by WW II were demonstrated again in the Korean conflict. Korea jolted us with some fairly costly evidence of just how deadly a weapon the mine can be. In just one instance there, for example, the enemy—with poor transportation facilities, little technical knowledge and improvised equipment—succeeded, through the use of mines, in stopping one of our invasion fleets for eight days—a first-hand taste of what we might expect in a conflict with a really mine-conscious enemy.

Since Korea, the Navy has put these lessons to good use.

All of our new minesweepers, for instance, are non-magnetic, even to their engines, tools and anchor chains. Their hulls are made of wood, and the arrangement of their minesweeping equipment has been greatly improved over that of their predecessors.

In addition, most U. S. minesweepers are now equipped with mine-hunting sonar. Augmenting the sweepers, too, are special mine counterbalance ships with teams of explosive ordnance disposal swimmers. Experiments have been carried out with minesweeping helicopters.

Together they form a strong and highly effective mine warfare team—and more and more graduates of NSMW stand ready to put all of this hardware to good use.

Here is a listing of the officer courses taught at NSMW:

Course Title	*Length (weeks)*
Aviation Mine Warfare Familiarization	3
Aviation Mines Maintenance	9
Submarine Mine Warfare Familiarization	1½
Submarine Mines Maintenance	7
Introduction to Mine Warfare	1
Surface Mine Warfare Familiarization	3
Surface Mine Warfare Familiarization (Reserves)	2
Prospective Engineering Officer	5
Mine Warfare Staff Officers	24
Mines Maintenance	20
Mines Maintenance (Reserves)	2
Minesweeping Officers	8
Degaussing, Ranging and Deperming	8
Degaussing—Shipboard Installation and Repair	3
Magnetic Compass Compensation	3
Senior Friendly Allied Officers	9

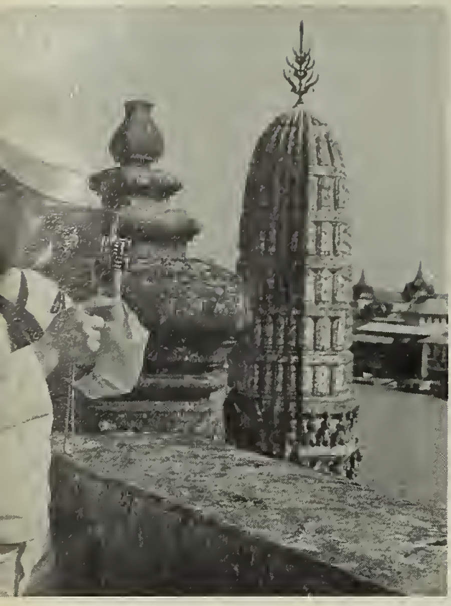
TOUCHY BUSINESS—Student works on mine under instructor's watchful eye.

The following courses at the Mine Warfare School are available to enlisted men:

Mineman (Class "A")	15
Mineman (Class "B")	20
Mines Assembly Refresher, Reserve Mineman (Class "B")	2
Aviation Mines Assembly (Class "C")	9
Electrician's Mates Ranging and Deperming (Class "C")	5
Minesweeper Automatic Degaussing (Class "C")	5
Minesweeping EM (Class "C")	11
Reserve Minesweeping BM (Class "C")	2
Reserve Minesweeping EM (Class "C")	2
Minesweeping BM (Class "C")	6
Submarine Mines Assembly (Class "C")	7

If you're interested in attending any of these courses, your first move should be to check NavPers 91769-E—the *Catalog of U. S. Naval Training Activities and Courses*—to determine your eligibility. Then, see your personnel officer.

'TALL TAIL'—NSMW students stream a magnetic sweep tail from an MSO.



SIGHTSEEING—Navymen tour Royal Palace (*rt.*), Temple of the Dawn (*left*) and (*below*) The Marble Temple.

Sightseeing in Bangkok

Two aircraft of Utility Squadron Five deployed to Bangkok, Thailand, earlier this year in order to furnish aerial target service for gunners of the Royal Thai Navy and Marines.

Twenty-four ships and an anti-aircraft battalion of Marines were involved in seven days of gunnery exercises. All concerned with the operation announced that it was a complete success and once again demonstrated that professional training is a solid foundation for cooperation and friendship among the navies of the United States and her allies throughout the world.

In addition to the satisfaction of participating in a successful naval operation, members of UTRON Five found time for some very interesting rubbernecking. The Royal Thai Navy arranged for tours of many of the more interesting sights in Bangkok. This included the Royal Palace, several awe-inspiring gilded temples housing Buddhas and a canal tour of the city's floating market.

HERE WE ARE—UTRON Five sailors admire figurehead of a royal barge and pose on temple steps in Bangkok.

LETTERS TO THE EDITOR

EOD Training

Sir: After reading the April 1962 issue of All Hands, I submitted a request chit via the normal chain of command for EOD training.

My request was approved by my department head but was disapproved by the personnel office. The reason given for disapproval was that a tour of shore duty cannot be terminated for the EOD school.

Did I use the correct procedure? If so, what instructions or notices can I use as references? If I must wait until I complete my tour of shore duty, should I request this school on my Seavey/Shorvey card?

Some of my friends tell me I will have to resubmit a request for the school and submit forms for security clearance, physical examination and such. Is this correct? — T. F. H., AO1, USN.

• *Shore tours are not usually broken to send a man to school, unless the school is a reenlistment incentive under STAR, SCORE or some other program. Stability of the service and conservation of travel funds are two good reasons for this policy.*

Since the personnel supply for schools is usually drawn from men rotating to sea duty, you should request the school on your Seavey/Shorvey card when your time for rotation to sea comes up.

Unless specifically requested, it is not necessary to submit forms for security clearance, physical examination or other prerequisites for a school. It certainly wouldn't hurt to have them ready but there is a limit to the amount of work and expense which Naval Intelligence, the medics and others involved would be willing to undertake without having a definite reason. They wouldn't have a definite reason if you had not yet been accepted for the school. — Ed.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

No Hats in CPO Mess

Sir: There are two Wave chiefs at this base who remain covered while eating. Are they correct? I believe they should show respect in a messing area by uncovering. It seems to me that if a woman wears a military uniform, she should comply with military etiquette. — R. E. V., DT1, USN.

• *You're right, R. E. In conformance with military etiquette and tradition, uniform hats are not worn in chief petty officers' messes. However, "U.S. Navy Uniform Regulations," Article 1110, para. 2, says in part: "Women may wear the hat indoors in accordance with civilian social customs." Generally, civilian social customs for women with respect to wearing of the hat apply outside the confines of a military activity.* — Ed.

Side, Center or Stern-Wheeler?

Sir: In your June 1962 letters to the editor, you stated the first USS *Pittsburgh* was a side-wheel ironclad gunboat of Civil War vintage. I think you may be in error.

The first *Pittsburgh* was not a side-wheeler but a center-wheel steamer; ironclad; 4th rate; 468 tons; and was one of seven such gunboats built by James B. Eads at St. Louis, Mo., in late 1861.

This information was developed by members of the USS *Louisville* Battalion, U. S. Naval Reserve, prior to renaming the Battalion for *Louisville*, a sister ship to the original *Pittsburgh*.

As far as we know, this is the first Naval Reserve unit (Surface Battalion 5-11) to be given a name in addition to the usual number. — J. J. Caulfield, CDR, USNR.

• *A history of* Pittsburgh *which should have been (but wasn't) unimpeachable, stated the wheel was on the side. Your battalion places it in the center.*

To get to the bottom of the matter, we went back to the specifications and other early data and wheeled out the following information:

As you say, Pittsburgh *was one of seven gunboats ordered from the Eads Company at St. Louis. They were launched in October 1861. All seven were described as stern-wheeled, casemated, ironclad gunboats. They displaced 512 tons and had a 51.2-foot beam and were 175 feet long. They carried 251 officers and enlisted men.*

We won't discuss whether a stern wheel qualifies as a center wheel. However, it seems apparent that All Hands *slipped a cog by placing the wheel on the side.*—Ed.

Temporary Officers

Sir: I am writing for information on the subject of reversion of Regular Navy officers holding temporary appointments.

The question has arisen concerning the group of commissioned officers who formerly were warrants but whose permanent status is enlisted.

My feeling is that these officers would revert to their former enlisted status. However, there are some on board this ship who believe this group of temporary officers who were commissioned from warrant and chief warrant status would revert to their former warrant status and retire as warrant or chief warrant officers.

I might add that this is based on the premise that none of these officers has completed 10 years of commissioned service as warrant and/or commissioned officer. — A. L. P., ENS, USN.

• *We're with you. There is no authority for reversion of a temporary officer (ensign or above) with permanent enlisted status to any grade other than his permanent enlisted grade even though he may have previously served under a temporary appointment in a warrant and/or commissioned warrant grade. If reverted to enlisted status, he would not be eligible for voluntary retirement under any law (unless he has completed 30 years of active service for retirement purposes under Title 10, U.S. Code 6326), but may be transferred to the Fleet Reserve upon his own application provided, of course, that he has completed the required service for transfer.* — Ed.

Uniform When Traveling

Sir: Does the Navy have an official travel uniform? Some of my shipmates contend that Service Dress Blue is the official travel uniform under orders, and others say that the uniform of the day is proper. — J. F. R., YN2, USN.

• *There are no specific regulations concerning the proper uniform for traveling. Normally, your travel uniform should be the one prescribed by your current duty station. Many commands state in their Uniform of the Day directive that Service Dress Blue may be worn on leave or liberty even though the normal uniform of the day may be Service Dress White. Upon reporting to a new command you should wear the uniform of the day prescribed for that command.* — Ed.

ONE BY ONE — Two F4H *Phantom II* all-weather jet fighters, 50 feet long and 16 feet tall at the tail, fly high over Southern California.

Now, There Was a SHIP

Sir: Your story on uss *Enterprise* (CVAN 65) in the February 1962 issue provoked much comment in the petty officer's mess aboard my ship, hmas *Anzac*. Since the largest ship we Australians have is *Melbourne* (a mere 21,000 tons) most of the interest centered around the living conditions on such a monster.

We'd like to know—does *Enterprise* employ DDs as liberty boats? And what size shore patrol does she land? How long does it take the Doc to inoculate the ship's company? How much do her anchors weigh, and what is the size of her cable? How many hours does it take her captain to inspect the ship's company? And how many divisions of Marines does she carry?

Seriously, though—we are virtually a destroyer-size Navy, and find it difficult to visualize anything of *Enterprise's* size. Could you give us some shipboard statistics, please?

I might add, too, that while we wish the very best of luck to all who sail in her, we just hope we are never in port together, as we feel the supply of beer and sheilas could never meet the demand. Many thanks.—John Whittaker, P.O., R.P.1, hmas *Anzac*.

• *We're flattered to hear from one of our sister navies. Your letter was circulated among the staff, and all of us enjoyed reading it. Several of us have worked with RAN ships, and have a high regard for the seamanship and elan so apparent in all RAN sea work.*

You ask about Enterprise. *You ask if she employs DDs as liberty boats and so on. Well, now. Maybe you have her confused with our most famous man of war—*uss Tuscarora, *no longer in commission.* Tuscarora *was a 17-decker, straw-bottomed, queen-of-the-ocean-seas, mistress-of-inland-waters, pride-of-all-who-beheld warship.*

In Tuscarora, *it is said—and who are we to gainsay?—there was such a ship's company that even the cooks had cooks to cook for them. A boot seaman, it is heard, once reported aboard. Before he finally made his way to report to No. 1 (the XO, or executive officer, we call him) he had already made CPO.*

To provision Tuscarora, *it took turnaround basis work by* ss Hamakura, *which, as you'll remember, had no whicher when it came to the size of a cargo packet.* Tuscarora, *we find by meticulous research, carried enough NSFO in her bunkers to fuel the entire Fleet, with enough left over to sail her around the world 52 times. That is why, when you examine the records, you'll find that even the oil king was a four-ringer (four-striper, as we say).*

Although Tuscarora *had only 24 firerooms, it should be noted that each was a triple-bank of eight boilers. She was, of course, a four-screw job—that is, four port, four starboard and four center.*

Despite her size, things usually were shipshape; Bristol fashion. To pay the crew—and perhaps you already know this—the U.S. Mint had a branch aboard. And, naturally, there was a main post office on the 15th half-deck space.

Now—there have been some exaggerations about this ship. To put the record straight, let us tell you it has now been proved that only half of the copper output of Anaconda mines went into the telephone system aboard Tuscarora. *And, you can't believe everything you hear. For example, we have finally been able to track down the size of her saluting battery: Only 24-inch guns, despite anything you may have heard elsewhere.*

Did she use battlewagons as liberty boats? Very seldom, according to the logs we have examined. Usually, it seems, a few squadrons of cruisers were entirely adequate to carry the liberty parties ashore, since the transport flotillas were almost always able to take most of them.

Her speed, as you realize, was an official secret. However, we have been given permission to reveal that she was never really opened up. Reason: In her first sea trial, what was originally thought to be a tsunami *caused by an under-ocean earthquake turned out to be* Tuscarora *answering the engine order telegraph when it read all ahead two-thirds—and she was out in the middle of the Pacific at the time.*

On the other hand, some statistics have been too cautious. She not only used the entire Kansas wheat crop for biscuits (breakfast only), but, moreover, took the entire crop of three Wheat Belt states and that of two Canadian provinces for bread. In one year alone, it has been stated, the entire output of California and Texas orange groves went into the Tuscarora *shops to make marmalade. At that, it was rationed to once a week.*

In the interests of veracity, let it be known that the Marine detachment embarked in Tuscarora *was only one division. The other division you must have heard about was, to put the matter straight, merely a battalion of provisional infantry used to stand sentry on the after brows, since an economical use of manpower was always something* Tuscarora *took pride in.*

The ammunition hoists, we may add (and still, to maintain only the truth), did not travel at 6G—only 4. The flag bags were not racked 14 decks high, only twelve.

Inspections of the lower decks were done by 80 separate parties, and took three days. Inspection of the upper decks, messing and berthing compartments took three days. So, as you can readily understand, the weekly reports did get in on time. They were usually sent topside before 1000 on Saturday, loaded into trucks and sent forward to reach the skipper (a Fleet Admiral) before 1200. Reason for this was that the skipper really loved his liberty. He always had his four-engined passenger plane (his gig) warming up on the port quarter airfield, ready to take off. Then, of course, he would circle the ship (it took 15 minutes) to check if the quartermasters had hoisted his absentee pennant. When he found it was too slow being two-blocked, he ordered another tractor put on the hauling lanyard, since the two in use had trouble pulling the weight.

This might sound like wasting money to satisfy a personal whim, but the skipper was all heart. When the tractors were not being used to two-block flags and pennants, they were shifted topside to the number six boat deck (the smallest one), where there was stored, in an out-of-the-way place, enough soil to cover the area of three baseball diamonds. The tractors, as you have no doubt gathered by now, would spread the dirt to make ball fields, and then would shove the dirt back into the storage area after the games so that ship's work could continue. In case you're wondering, the bleachers and grandstands of number six boat deck were all shifted into position using topping lifts, a part of the rigging that had been set up to highline steam engines and boxcars from deck to deck to facilitate movement fore and aft of coffee bags for the various coffee messes.

The flag officer's swimming pool (the small one) was not used for the mile swim in the Olympic Games. This was a disappointment to everyone. Have you gotten the whole story on that? It seems the surveyors found the length to be only 5265 feet—obviously unsuitable.

So, friend Petty Officer Whittaker, we're glad to set the record straight. The known research ability of All Hands *Magazine can be put in motion at any time to dredge up the real, the true, the factual fact. As avid fishermen, we have a reputation concerning truth. That being the case, let us tell you this one last true story.*

When one of our staffers was a brash young ensign, he was assigned to Tuscarora. *His main duty was overseeing the patrol of one of the shaft alleys (there were 12, as you remember). Well, sir, he had the bright idea one day of stealing some of the dirt used for the ball fields. By dint of much maneuvering and chicanery, he was able to do so. It was put in an after compartment leading off HIS shaft alley (as he so fondly thought of it). His patrol crew was small—only 250 ratings—but there were other fishermen in it. So, tapping into a fresh-water pipe (they blasted with TNT), they fitted a penstock—so small it wouldn't be noticed in the ship's water use report—a mere 20-incher. They soon had a rushing stream. That—ah—you're ahead of me—they stocked with steelhead trout. By proper management, they grew some mighty fine fingerlings in the hatchery. They fed them properly. Result: 20 pounders they threw back in. Record: 158.663 pounds. (I give it to you exactly as a demonstration of absolute truth.)*

Incidentally, speaking of Enterprise, *sure wish she'd been around when we were in* Tuscarora. *What a fine boat she'd have made to put in the water when we felt like trolling for whales.*—Ed.

Life in the Australian Navy

Sir: Thank you very much for your account of that great ship *Tuscarora.* And I was worried about *Enterprise*? If I ever see *Tuscarora,* I'll request transfer to the Army.

I am enclosing a few notes on the RAN that might be of interest to you and your readers.

A Guide to the Enlisted Man in the Royal Australian Navy:

When you meet an Australian Navyman, don't ask what part of England he comes from. That's like asking a Texan what part of Alaska he comes from. Our uniforms and some of our ships look British, but Australia is worn as proudly on our buttons and cap ribbons as is the Commonwealth flag flown for'd.

We know we have the best beer in the world and the worst licensing laws. We think we have the best beaches in the world, and about the worst railway system. To get back to the Navy side of things, though, here is a rundown on the grades:

SEA STORES — USS *Altair* (AKS 32), ex-AK 257, was reclassified as a stores issue ship in '52, now sports helo platform on fantail.

- *Ordinary Seaman*—Equivalent to the seaman apprentice, he respects all in authority over him, and this means everyone. Never has enough to eat, frequently has too much to say. Seldom gets the word.
- *Able Seaman*—Thinks he does all the work but doesn't. Respects anyone who has caught him out, and is normally found in dark compartments like messdeck stores. He is seen twice a month on the upper deck for payment, and on every liberty boat. Dislikes all POs, coxswains and officers, in that order. Has always served on a better ship than the one he is on, and is recognized by the cry "We never used to do it like this on the . . . . . ."
- *Leading Seaman*—All same PO2 in the USN, he has the worst job of the lot. He has to rip lumps out of both the above, and then sit down at the mess table and ask them to pass the salt. Speech is normally indecent, as a result of which he is embarrassed when speaking to a civilian or a member of the Air Force, owing to the need to censor his usual reply.
- *Petty Officer*—Similar in uniform to the USN CPO, he cannot remember when he last had a friend. Knows he does all the work, and could tell the Navy Board how to run the Navy anytime. Doesn't believe in officers, and doesn't believe ordinary seamen. Spends his off-duty hours in the mess telling other POs the Navy has had it. Spends his liberty telling old ladies he is not a cab driver.
- *Chief Petty Officer*—Cannot remember anything. Has a senile appearance which belies his ability to do the opposite an officer tells him and still appear to obey. Thinks all petty officers have gone to the pack, and knows all officers have.
- *Gunnery Instructor*—Either a chief or PO, his voice can be heard as far away as that of an enraged pig, and sounds about as musical. Reacts violently to any suggestion that missiles will replace guns. Only smiles when the next ship astern demolishes the tug instead of the target. Is responsible for training the ship's ceremonial guards and the gun crews. Dislikes everyone, and has never heard of radar.
- *Radar Plot Instructor*—Can be recognized by the battery of grease pencils in his shirt pocket. Knows the ship can get along quite well without gunnery instructors. Normally found in the dimly lit CIC (or, as we call it, the Operations Room) his gleaming eyeballs can be distinguished from the other gleaming eyeballs by the cry "Miss that bogey again and you're in the gunnery branch."
- *Torpedo and AS Instructor*—Habitually wears a harried or gloomy appearance, and accuses all critics of having the intelligence of gunners. Is always in evidence, but never appears to do much until a torpedo is about to be fired, when he can never be found. He tolerates the rest of the Navy, except gunners.
- *Electrician*—Normally dressed in overalls with acid burns all over them, he wears a preoccupied look which hides a desire to clobber all seamen who paint over light fittings and then complain when they don't work. He shuffles round the ship, muttering Ohms law to himself, and calling on some electrical deity to protect him from the ignorant. To him this means everybody.
- *Chief Mechanical Engineer*—Wears the same overalls as the above—without the acid burns. Reacts violently to the pipe "Engine Room stop making black smoke." Lives in some dark recess from which he only emerges to smile when a fuel hose parts during replenishment and the seamen see what happens to their paintwork. Hates all seamen, and wonders what the Navy Board is up to when he looks at his recent intake of stokers.

The writer has also made some notes on the officer structure, but feels that publication of same would ensure a draft to the Antarctic—for good. He also wishes to add that he belongs to the fourth category down, if that means anything.—John Whittaker, Petty Officer, Royal Australian Navy.

ON THE MOVE—Attack aircraft carrier *USS Forrestal* (CVA 59) cuts her way through waters of the Caribbean Sea while on training exercises.

Eligibility Date for E-8

Sir: There has been some discussion on board about an apparent inequity concerning eligibility of certain E-7s for the next scheduled examination for E-8.

According to Para. 3, Article C-7204 of the *BuPers Manual*, 48 months in pay grade E-7 are necessary for advancement to pay grade E-8. The terminal date for computing time in rate for the August examination is 16 November.

Here is the rub. CPOs who were advanced on a January promotion list will have only 46 months in rate when the cutoff date rolls around.

Is it the intent of BuPers to require this one group of men to have 58 months of service in rate or will waivers be granted?—G.H.W., ENC, usn.

- *BuPers was aware that the cutoff date of 16 November would work to the disadvantage of the men on a January advancement list but, after all factors were considered, the cutoff date was maintained.*

Unfortunately, when you start working with an organization as big as the Navy, it is necessary to adopt and stick to certain requirements. For that reason, the Bureau contemplates no waivers. —Ed.

Navy Payroll

Sir: During a recent group discussion, several questions were asked on Navy Payroll Savings. In particular, where is the money deposited and who pays interest on it? Can you explain other parts of this program?—J. R. K., AT1, usn.

- *A Navyman may deposit not less than $5.00 each month with his disbursing officer. These deposits can be made either in cash or by pay record checkage. All sums which stay on deposit six months or longer earn four per cent yearly interest. Normally, deposits may not be withdrawn until your enlistment expires, except that with your commanding officer's permission, emergency withdrawals may be made.*

Payments are redeposited in the U.S. Treasury in a separate fund called "Pay of the Navy, Deposit Fund." Interest comes from the same appropriation from which a Navyman's regular pay and allowances are paid, and is charged to a special expenditure account called "Interest on deposits of enlisted personnel." — Ed.

Right Planes, Wrong Captions

Sir: You goofed badly in the centerspread "Carrier-Based Navy Planes" (pages 32 and 33) in your August 1962 issue when you mistakenly captioned the F4H *Phantom* as an A2F *Intruder*, and vice versa.

This type of foul-up, to an airdale, is about as grating as a caption identifying a destroyer as a CVAN would be to a tincan sailor. Wha' hoppin?— S. L. C., AKAN, usn.

Sir: By now I'm sure you've received numerous complaints from jostled and jaundiced jet jockeys regarding the centerspread in your August 1962 issue. May another saddened Stoof driver add his protest over the reversal of captions under the photos of the F4H and A2F?—F. L. K., LCDR, usn.

- *To all you outraged airdales, jostled and jaundiced jet jockeys, saddened Stoof drivers and all others who've written in, as well as you others who've suffered in silence, our humblest apologies. Our research and layout people have been sentenced to two weeks of plane recognition classes.*

If you were planning to mount that August centerspread, or use it in recognition training, transpose the captions for the F4H Phantom *and A2F* Intruder.—Ed.

Programs for Color-blind

Sir: My nephew has been interested in obtaining a commission in the U. S. Navy since he graduated from high school. At that time, he tried to take the NROTC examination but was disqualified because he was color-blind.

Since then, he has attended college and will graduate with a law degree in December. After that, he is eligible to be drafted. It now appears this will happen early in 1963.

His primary interest is still the Navy and I have been looking for a program for which color blindness is not a disqualifying factor.

I should think one of the staff corps would be the logical place for him but I have been unable to get the exact requirements for them. I think a man of his background would function best as a supply or legal specialist.

Can you tell me if there is a program in the Navy for which color blindness is not a disqualifying factor for a commission? If so, where can I get details on the program?—E. H. M., CDR, usn.

- *Color blindness can be waived for officer candidates in the law specialist category.*

We suggest that your nephew go to his nearest Navy recruiter where he can obtain complete information—Ed.

Pro Pay and Reenlistment Bonus

Sir: I have been giving the subject of pro pay considerable thought recently and have come up with a few conclusions.

As I understand it, pro pay is designed to provide an incentive to personnel serving in ratings for which long periods of schooling are required and/or in which severe shortages exist.

It's a well-known fact that the Navy loses many of its technical personnel to civilian industry. To even up the pay gap, the Navy instituted the pro pay system to keep its technicians in the Navy. However, it seems to me, the men with seven or more years of obligated service are the ones who benefit from the program. This is not good because they are in less danger of being lost to civilian enterprises than the relative newcomer.

In other words, it is benefiting career men almost exclusively and not accomplishing its purpose of retaining those who have not been in the Navy long enough to consider themselves career men.

It seems to me the reenlistment bonus should be doubled for men in critical ratings who have completed three years of active service in their first enlistment.

I also suggest that eligibility for pay for unused leave and travel allowance to home of record be extended to include E-4s and E-5s in critical ratings who reenlist up to 12 months early.

There is also a morale factor to be considered. Personnel who do not draw pro pay take a dim view of the men who get it every payday.

If a one-time reenlistment payment were substituted for the added pro pay, there would be less of a difference to serve as a goad to discontent.

Of course,. I realize there are some legal aspects which would have to be ironed out. The 2000-dollar limit on reenlistment bonuses is an example of this.

There are undoubtedly a number of other rough edges on this proposal. Nevertheless, I think it would work and serve the Navy and Navymen better than the system now in use.

What do you think? — G. A. W., YN2, USN.

• *A plan similar to yours, called "The Variable Reenlistment Bonus," was submitted to the Department of Defense in January 1961. The "variable" in the title was related to the cost of training a replacement.*

However, the program was rejected because it wasn't suitable for all the services.

A newer program pertaining to a variable reenlistment bonus is now in the planning stages. — ED.

Another Basraite

SIR: I constrained myself until the June issue came out before writing about my first trip to Basra in a Navy ship.

I read with interest of all the various ships who claimed firsts, or at least said they were there before *Dux*.

It has been a long time since I was there and it is difficult to recall the facts accurately, but I believe it was in April 1947 that USS *Harlan R. Dickson* (DD 708) steamed into Basra.

Dickson's gun salute was answered by an antique cannon which surprised all hands when it didn't blow up.

Dickson moored to a lumber yard pier and the British officials and Basra police came on board to pay calls. They told us that *Dickson* was the first United States warship to visit Basra since 1853.

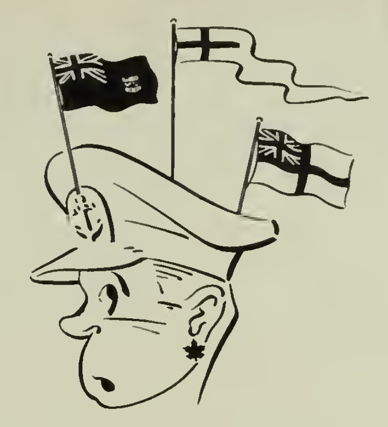
While we were on our way to Basra, we had on board a lieutenant commander whose name I can't recall, but who spoke with a crisp British accent.

He lectured us on the customs and religions of various countries in the area and this proved to be a valuable service both to the men on board and to the people of Basra.

A group of British soldiers was stationed outside Basra and members of *Dickson's* crew were invited to share their rations.

The invitation was appreciated even more by our crew when they realized just how meager the British rations ashore were. Cigarettes, for instance, were issued 40 to a man per month.

In return, the crew had the British troops on board for dinner. Many of them were introduced for the first time to iced tea and when they left, each British soldier had an ample supply of our sea store cigarettes.



Where's the Cut?

SIR: All right, I give up! Where *is* the cut indicated by "(see cut)" in the box on page 25 of your July 1962 issue? — Joe Harrington, JOC, USN.

• *Here 'tis. We happen to know you've had years of experience on publications, and you know how such things can happen. It was drawn by the Canadian Naval officer who sent in the original letter you referred to —pretty good, we thought. So, we had it ready to go. But it didn't. We goofed. Our apologies to LT Chaplin, RCNR.*

For the benefit of those who missed the July issue, here's LT Chaplin's letter again. — ED.

SIR: *In the letters section of the December 1961* ALL HANDS *a USN correspondent identified as an HMCS, enquired whether badges should be worn on collar and sleeve while serving with a Marine unit. The question does not seem to be valid.*

Everyone knows that HMCS stands for Her Majesty's Canadian Ship. Therefore, your correspondent should wear the white ensign at the taffrail, the Canadian blue ensign at the jackstaff, the white masthead pennant at the fore truck, and a red maple leaf on either side of the funnel. I enclose a diagram (see cut). — Philip Chaplin, LT, RCNR.

There was no people-to-people program then but a warm friendship certainly was formed between many British and American servicemen.

Before we left Basra, a local firm sent the ship a present of several boxes of dates stuffed with nutmeats, which we later learned was quite an unusual gesture.

After we left Basra, *Dickson* visited a number of other ports in the Persian Gulf among which was Kuwait, where we entertained the Sheik of Kuwait and his family at dinner.

Our duty in the Persian Gulf was long and hot but, as I look back on it, it was most informative and interesting. — W. R. Chandler, BTC, USN.

• *It's really a pity we can't appreciate more what we have when we have it.*

Thanks for your very interesting letter. We suppose it is too much to hope for to hear from one of the descendants of the crew that stopped at Basra in 1853. — ED.

Preferred Sea Duty

SIR: Would you please describe the procedure by which a billet is classified as sea duty, preferred sea duty, or shore duty? Also, would you define "preferred sea duty" and the assignment procedure for it? Take the following case:

Upon completing a tour of shore duty, an LDO (Engineer) officer received orders to what was considered sea duty, aboard a YR, which was headquarters of a COMRADRON. Later, due for normal rotation, he received orders to a second sea duty billet. He was told that the YR was "preferred sea duty" and that in consequence he could be assigned to either sea or shore duty.— F. W., LT, USN.

• *There is no official definition, per se, of "preferred sea duty" as it applies to officers in this category. In the assignment of officers, the designation "preferred sea duty" is usually determined by the arduousness of the duty, particularly the deployment schedule of the unit. The YR in question is a floating workshop, which stays in one place. While attached to the forces afloat by virtue of the administrative organization and while it is considered "sea duty" to meet the sea duty requirements for promotion, it is not considered sea duty for rotation.*—ED.

SHELL STOCKED — **USS *Great Sitkin* (AE 17) displaces 15,295 tons when fully loaded and is capable of speeds in excess of 16 knots.**

Data Systems Technician

Sir: I have been unsuccessfully searching for some information about the Data Systems Technician Rating (DS).

My primary job is maintaining the computer used with the underwater battery fire control system.

Inasmuch as I am in this type of work, it seems logical that I should be in the DS rating.

Where can I get information on this subject? – S. C. S., SOG2, usn.

• *You have been looking for BuPers Notice 1440 of 19 Mar 1962. The rating was established with that notice and it contains quite a bit of information. Here are some of the high points:*

The rating was established primarily to provide men to maintain electronic digital data system equipment in ships and in operation control centers.

It does not include the operation or maintenance of business machine type equipment, such as that in personnel accounting machine installations. This is still the job of the MA rating. Nor is the rating intended to be applied to everyone who works on computers.

On 1 May of this year, everyone, including strikers and inactive personnel, in the ET, FT and MA ratings, who had BuPers-controlled ET NECs 1561 through 1569 and MA NECs 2743 and 2762, were changed to the DS rating.

The above NECs have been changed to new numbers under the DS rating series and appear now in a new "Manual of Navy Enlisted Classifications," *NavPers 15105C.*

The first advancement in rating examination for the new rating was given in August.

The training course for Electronic Technicians will be the study guide for the DS rating until a new guide based on DS qualifications can be written.

There is a 16-week computer basic course given at the U. S. Naval Training Center, Great Lakes, Ill., followed by a basic course in computer programing at the Naval Electronic Laboratory, San Diego, Calif., plus factory training.

There is also Class C school-level training at the Operation Control Centers. Class A, B and C schools will be established for the rating, and information on them will be distributed before they are established.

Everyone who was changed to the new rating and who was receiving pro pay at the time, continued receiving pro pay. The DS rating will probably be listed as a critical rating for proficiency pay in FY 1963.

The path of advancement for the rating is to Limited Duty Officer, Electronics. — Ed.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- uss *Mellette* (APA 156)—Those who served on board during 1950 through 1952, who are interested in holding a reunion, may write to J. L. Krivjansky, 327 Beck St., Norfolk 3, Va.
- Navcomfacphil and secgru, Sangley Point Naval Air Station, Philippines—A reunion is being planned for all who served from 1955 to 1960. For details, write to Jerry Dahlstrom, CT3, usnr, 1733 Granville, Apt. 12, West Los Angeles 25, Calif.

Pittsburgh's LST

Sir: In regard to the letter from E. J. A., YN1, usn, in the June 1962 issue of All Hands about an LST named *Pittsburgh*. The ship referred to was not named *Pittsburgh*. It was LST 750, launched on Memorial Day, 1944.

Payment for her was made by Allegheny County residents through a special "E" bond drive, which realized approximately $4,000,000. For this reason, the ship was towed up the Ohio River to Pittsburgh and moored in the Allegheny River at the foot of Sixth Street for display to the public. It was commissioned in early September 1944. — J. F. Johnston, Jr., LCDR, usnr (Ret).

• *Our thanks, sir, for filling us in on some missing history.* — Ed.

Harrisburg, WW I Troop Ship

Sir: Can you give me some information regarding uss *Harrisburg*? Nobody here seems to know much about her and I have been unable to locate any books that even mention her name.

We feel she was a World War I troop transport.—D.R.B., YN1, usn.

• Harrisburg *was designated Section Patrol No. 1663. She had formerly been named* Philadelphia *and* City of Paris.

Harrisburg *was constructed in 1887 at Clydebank, Scotland, and was acquired by the Navy from the International Mercantile Marine of New York.*

She was placed in commission on 29 May 1918 and was employed as a troop transport through World War I.

She displaced 15,390 tons, was 527 feet, six inches long and had a beam of 63 feet, three inches. Her speed was 21 knots and her complement was 565. She carried two six-inch, two four-inch and two one-pound guns. She was decommissioned in 1919.—Ed.

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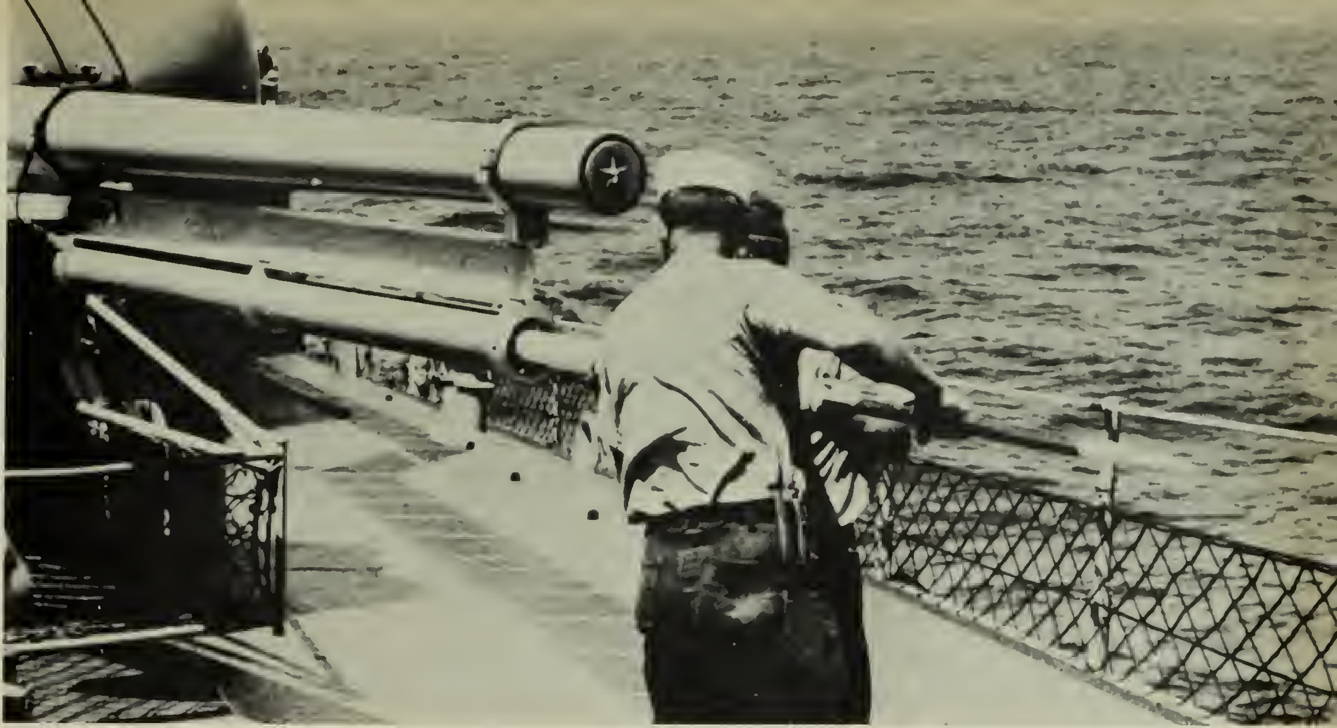


HIGH ALTITUDE Sounding Projectile (HASP) is loaded into LOKI launch tube. Below: HASP roars skyward.

LOKI Helps HASP Make Good

The Navy has increased the Fleetwide adaptability of its High Altitude Sounding Projectile (HASP) by successfully firing it from a LOKI launch tube attached to the barrel of a modern 5-inch/54 rapid-fire naval rifle aboard ship.

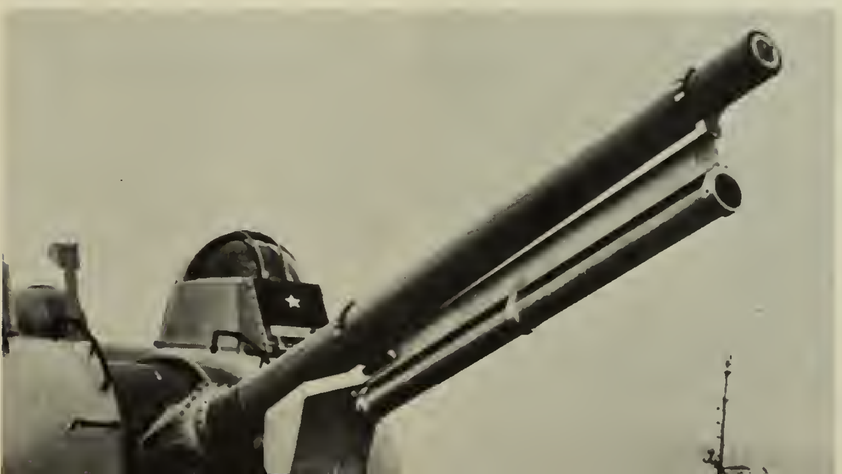
HASP, a weather rocket, was originally designed to use, as its launching tube, the inside of the gun barrel of the 5-inch/38 rifle found on many Navy ships. However, the automatic handling and loading equipment of the modern 5-inch/54 prevented its use with that gun before now.

The first firing of HASP with the new technique took place aboard USS *John S. McCain* (DL 3) in the Pacific. According to a representative of the U. S. Naval Ordnance Laboratory in White Oak, Md., where HASP was developed, "this launch was a complete success."

HASP was developed for use on land, or aboard ships at sea, to collect weather data from the stratosphere. When launched, the HASP rocket motor boosts a slender payload up to an altitude of 40 miles, where a load of copper chaff is released to float back to earth. Fire control equipment on board the ship tracks this cloud of copper wire to ascertain wind direction and speed at any altitude through which the chaff descends.

HASP's project manager says its payloads will soon include a parachute-supported radiosonde. This package will not only determine wind direction and speed, but temperatures and pressures as well.

CLOSE-UP shows LOKI launch tube under barrel of 5-inch/54 rifle.



SPECIAL DELIVERY — Guided missile cruiser *USS Boston* (CAG 1) receives deckload of stores by highline during replenishment on the high seas.

USS *NITRO* delivers hot cargo.

These

THE NAVY HAS PROGRESSED considerably since shipboard messes featured powdered foods and ships found it necessary to put into port every time they replenished their ammunition and other supplies.

The big change in eating was brought about by reefers—the refrigerated AFs, the largest of which are in the *Rigel* (AF 58) class. The second largest class is the *Hyades* (AF 28) with an over-all length of 469 feet and a full load displacement of 13,900 tons.

Hyades and her sister ship are floating grocery stores. They come well loaded with staples, chilled fresh foods, and frozen foods. They are big enough to carry sufficient food to feed 30,000 men for 30 days.

To accomplish this, the reefer's cold areas must be kept at different degrees of frostiness—sufficiently varied to take care of frozen meats, chilled produce and other perishables. Staple items such as coffee, flour, sugar and canned goods are, of course, stored in non-refrigerated spaces.

By the time *Hyades'* customer pulls alongside, the deck crew has readied the cargo and the transfer equipment. All hands not actually engaged in operating the ship turn out to get the victuals transferred.

FOR SUPPLIES OF PAINT, nuts, bolts, wire, printed forms and what-have-you, the ship to find is the AKS. These general stores ships are built in two classes—USS *Castor* (AKS 1)

ORDER UP — USS *Antares* (AKS 33) will have order ready by the time the customer ship is alongside.

Ships Put Go in Cargo

and her sister ship *Pollux* (AKS 4) displacing 11,310 and 13,500 tons fully loaded, respectively, and approximately 460 feet in length, and the *Altair* (AKS 32) class and her sister ship USS *Antares* (AKS 33), displacing 10,440 and 12,000 tons fully loaded, respectively, and just under 456 feet in length. Ships in both classes steam at about 16.5 knots.

Antares, a merchant ship converted to her present use in 1952, is typical of the *Altair* class. The heart of her supply system is her computer room, which has two card punch machines, an accounting machine, a sorting machine verifier, reproducer and collater.

With the help of this equipment, hold supervisors are notified, the needed material is gathered, placed on a vertical conveyor, and carried to the deck. By the time the customer ship is alongside, the order is ready.

There are five holds, three of which have two vertical conveyors each, that are used almost exclusively for transporting supplies to the deck. The holds are opened only for items that are too large for the conveyors.

Antares' wares are so diversified that she can supply carriers, destroyers, cruisers and various amphibious ships as well as her own underway replenishment group ships.

THE SHIPS WHICH PROVIDE the ammunition are the AEs. The largest are in the *Suribachi* (AE 21) class with a full-load displacement of 17,400 tons.

They diminish in size to the *Wrangell* (AE 12) class (14,450 tons fully loaded), the *Lassen* (AE 3) class (14,225 tons fully loaded) and the *Sangay* (AE 10) class (10,650 tons fully loaded).

Ships of the *Suribachi* class were first authorized in 1954 and were built from the hull up as Navy ships to meet modern rapid replenishment at sea requirements.

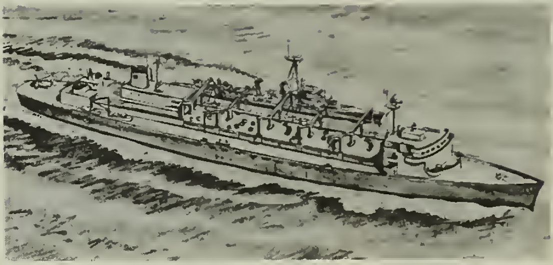
Elevators are used for internal handling of ammunition and explosives and the latest methods of cargo stowage are used. *Suribachi*-class AEs also rate high in habitability improvements.

The key words for ammunition handling are speed and safety. Mechanical dunnage, fork lift trucks and cargo hold elevators speed large amounts of ammunition to transfer position. Electric winches with constant tensioning devices permit unusually rapid and safe transfer at sea under all but the roughest conditions.

These types are contributing factors to the tenacity of combat forces at sea—their ability to cover unremittingly the world's trouble spots and, when necessary, to sustain attack without having to return to port for supplies.

AIRLIFT — Copter takes stores from the fantail of USS *Altair* (AKS 32).

A is fo



AOE (FAST COMBAT SUPPORT SHIP)—This is designed to speed up underway replenishment.

AO (OILER)—Oilers
line and other petroleu

AE (AMMUNITION SHIP)—The latest AEs will have a mechanical loading and unloading system.

AVS (AVIATION SUPPLY SHIP)—This ship's primary issue is aircraft parts. Its our only AVS.

AOG (GASOLINE TANKER)—In addition to gasoline, AOGs provide other petroleum products.

AKL (LIGHT CARGO SHIP)—This ship transports limited quantities of cargo between bases.

AS (SUBMARINE TENDER)—The AS provides various services and limited supplies to subs.

AD (DESTROYER TENDER)—The AD furnishes mobile facilities for repair and small-scale supply.

Prepared by ALL HANDS Magazine

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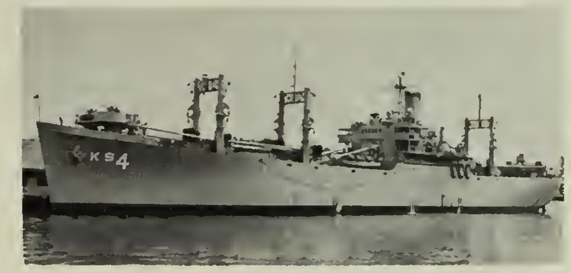
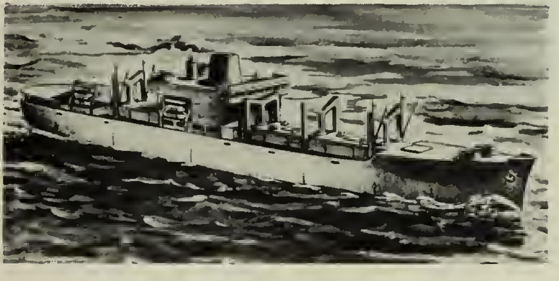
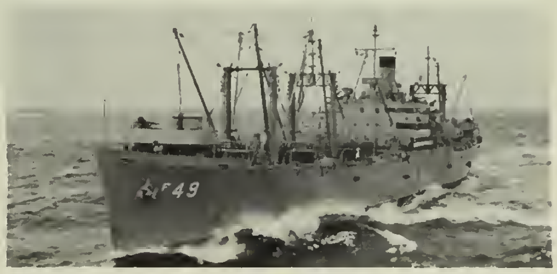
sport black oil, gaso-
oducts to ships at sea.



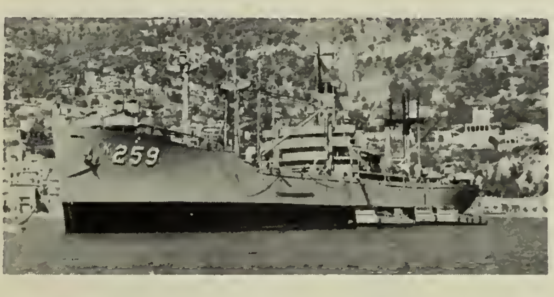
AKS (GENERAL STORES ISSUE SHIP)—An AKS supplies general stores items and repair parts.



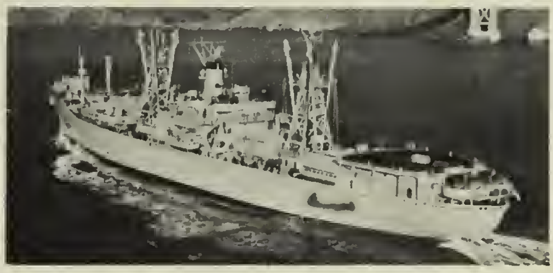
AFS (COMBAT STORE SHIP) — This new ship will eventually replace the AF, AKS and AVS.



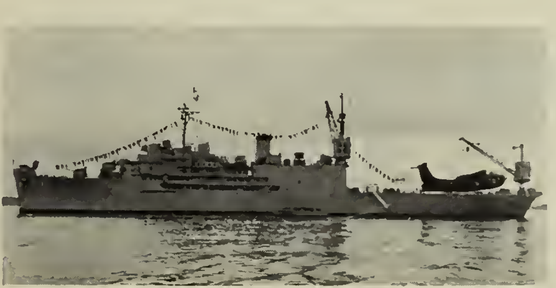
AF (STORE SHIP)—An AF is designed to deliver refrigerated food and provide afloat storage.



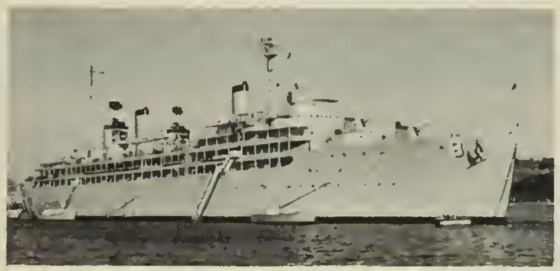
AK (CARGO SHIP)—The AK transports, and delivers to overseas ports, all types of general cargo.



AKA (ATTACK CARGO SHIP) —The AKAs transport combat cargo for amphibious assaults.



AV (SEAPLANE TENDER)—AVs provide the local support necessary to operate seaplanes.



AR (REPAIR SHIP)—The AR furnishes repair facilities and limited support to various ships.

MOTHER LOAD—Submarine tender *USS Proteus* (AS 19) tends to two of her brood in Holy Loch. *USS Betelgeuse* (AK 260) is moored to her port side.

Biggest Missile Frigate

USS *Leahy* (DLG 16), the largest guided missile frigate in the world, the first of an entirely new class of DLGs, was commissioned in August at the U. S. Naval Shipyard, Boston, Mass.

The 533-foot *Leahy*, first ship named in honor of famed Fleet Admiral William D. Leahy, USN, is the 11th and largest DLG to join the Fleet. She carries a total crew of 373 Navymen.

At 5670 tons (standard displacement) *Leahy* is some 900 tons heavier than the *Coontz* class DLGs which have been joining the Fleet since 1959. She carries the *Terrier* surface-to-air guided missile, and is the first frigate to be equipped with missile launchers at both ends of the ship. In addition, she is armed with *Asroc*, antisubmarine torpedoes and two 3-inch 50-caliber twin antiaircraft guns.

Fleet Admiral Leahy, an 1897 graduate of the Naval Academy, served his country with great distinction in a long and brilliant career. One of four naval officers to hold the rank of Fleet Admiral by act of Congress, he served, at various times, as Governor of Puerto Rico, Ambassador to France, Chief of Naval Operations, wartime Senior Member of the Joint Chiefs of Staff and Chief of Staff to President Franklin D. Roosevelt.

Leahy is a unit of the Atlantic Fleet, and is homeported at Boston.

YESTERDAY'S NAVY

In Oct 1795 a treaty of amity, commerce and navigation was concluded between the U. S. and Great Britain. On 1 Oct 1862 the Mississippi Flotilla was transferred from the War Dept. to the Navy Dept. On 1 Oct 1946 the Naval Air Missile Test Center was established at Point Mugu, Calif. On 23-26 Oct 1944 the Battle of Leyte Gulf was fought in three engagements. It was the biggest naval engagement ever fought and it destroyed Japanese seapower. On 28 Oct 1779 a Board of Admiralty consisting of five members was given control of all naval affairs.

Norfolk's CIC School

A wellspring of trained men capable of interpreting what the Fleet's eyes see is located at Norfolk, Va. It is the Combat Information Center School which has been training men for CIC duty with the Atlantic Fleet since 1946.

The school is equipped with about a million dollars worth of electronic gear, which includes radar target simulators, airborne early warning terminal and simulator equipment, radar signal generators and intercept search receivers.

All this is included in several drill rooms and five mock-ups of shipboard CICs at the school.

The object of the school is to instruct Navymen in the latest CIC procedures being used in the Fleet. To do this, the student is given experience with Fleet units.

For instance, in AEW exercises, the student uses either simulated or actual AEW planes in his air defense training with ships in the Norfolk area. He also gets practice in passing operational traffic over the radiotelephone.

In ECM exercises, the school's portable signal generator unit sends out signals that are picked up by ships in the Norfolk area which report them to the exercise control station in one of the shipboard CIC mock-ups at the school.

The school is divided into three sections for classroom and mock-up instruction—the CIC section, the electronic countermeasures section and the air control section.

There are seven courses offered in the CIC section. They range from the basic, which is aimed at personnel with little or no CIC experience, to the more advanced courses in CIC procedures.

The more advanced course covers ASW, AAW, formations and screens, and the maneuvering board.

When the student has completed the advanced course, he is capable of assuming supervisory duties during a CIC watch. He is also ready for advanced courses in ECM and CIC team training.

The team training teaches the

student CIC operations, naval tactics and operating procedures on a group level. Its instruments of instruction are mock-ups of DD, DER and cruiser CICs in which ersatz shipboard drills take place.

The electronics countermeasures section provides the trainee with an elementary knowledge of standard ECM equipment and operation.

Teamwork is also stressed here since many of the problems thrown at the student give him a chance for tactical reporting as a group member.

The course, which also includes preventive maintenance and tactical reporting procedures, is open to both officers and enlisted men, with supervisory aspects stressed in the officer course.

The air control section offers two basic courses—antisubmarine air control and intermediate air intercept control.

The basic antisubmarine course is designed to provide both commissioned officers and senior petty officers with practice in controlling fixed wing and rotary wing antisubmarine aircraft.

When the student completes this course, he is ready to take on studies which will qualify him to handle fast jet aircraft.

The school does not limit its efforts to United States Navymen. It also provides foreign officers with the fundamental knowledge and skills required to operate a modern combat information center.

Last year the school turned out 6996 graduates.—

—C. S. Allen, RDCM, USN.

Camera Party's Last Photo

Like an old soldier, the Atlantic Fleet's Photo Triangulation Group didn't die, it just faded away.

In July the group, which had taken pictures in the Atlantic area since 1941, combined with the Mobile Motion Picture Group to become the Atlantic Fleet Mobile Photographic Unit.

The Photo Triangulation Group, which claimed to be one of the oldest units in the Atlantic Fleet's Service Force, was organized in 1941 and was known as the Camera Party for the Atlantic Fleet. Its job was to photograph gunnery exercises for the United States Atlantic Fleet and for exercises held by ships of allied fleets.

During World War II, the group had units at Portland, Maine; Guantanamo Bay, Cuba; Bermuda; Trinidad; and San Juan, Puerto Rico.

UNDER TOW — Mothballed USS *New Jersey* (BB 62) gets underway at Bayonne, N. J., for new home with Reserve Fleet in Philadelphia.

Before the Normandy invasion in June 1944, many allied ships employed the group's photographic services in the Virginia Capes area. Its business steadily increased from photographing 10 gunnery exercises per month in 1941 to more than 300 exercises during 1945.

By the end of the war, it had photographed 2026 ships engaged in 5204 gunnery exercises firing a total of 128,074 salvos.

More recently, some of the Group's big jobs included photographic coverage for all *Project Mercury* orbital and sub-orbital flights, the President's early 1962 visit to Norfolk and salvage operations incident to the rescue of USS *Baldwin* (DD 624) and USS *Monssen* (DD 798).

Fish Star on TV

The fact that sea animals make noise is not news to marine biologists. They have been listening for years to the hydrophone recorded voices sounding all the noises which so utterly confuse sonarmen.

The big question, which has hitherto been unsolved, is exactly which marine animals make what particular sounds. Scientists think they know, in most cases, but there has always been that lingering doubt.

That doubt is now in the process of disappearing. The Office of Naval Research (ONR) has contracted with the University of Miami's Institute of Marine Science for the purpose of ascertaining which animals make what noises.

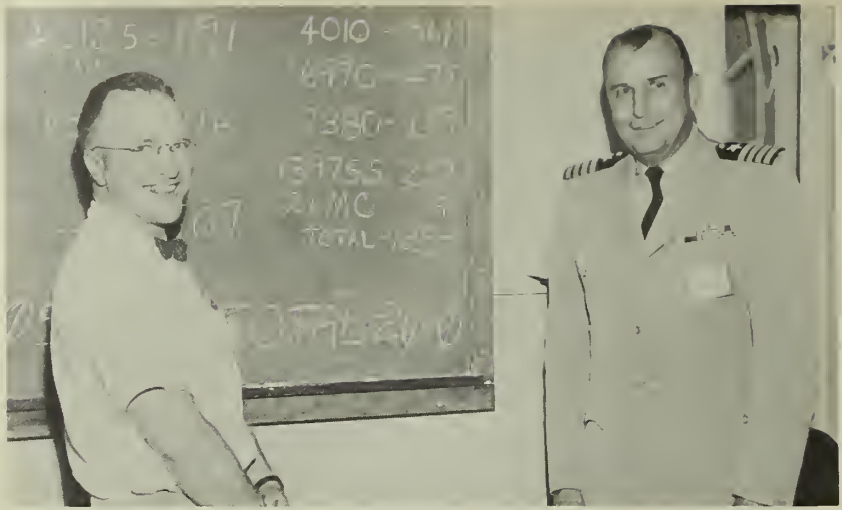
One answer to the problem was to photograph the animals while they were making the noises. The animals under study were those indigenous to the Florida Straits or those which migrate along the Gulf Stream. Part of the project concerned the sound producing ability of specific animals and their sound scattering and/or absorbing properties. The results are observed at the Lerner Marine Laboratory, Bimini, over closed circuit TV.

In future studies, the University of Miami may resort to some pretty sneaky tactics in which chemical and biological stimuli will be used to get the animals within camera range.

After the pictures are taken, ONR has to separate the sounds made by one particular animal under study from background noises, then compare the sounds made by the same animals in captivity.

The sound samples are taken at several depths and laboratory comparisons are made of all of them. Glass boats and Scuba divers are also used to obtain visual observations.

For Navymen who swim underwater in the Gulf Stream or off the Florida Coast, the moral is clear: when you see a combination of Scuba diver, glass bottom boat and microphone, smile; you're on TV.



HAPPY ENDING — CAPT S. L. Hutchinson, USN, CO of U. S. Naval Communications Station, Wash., D. C., and CDR R. L. Baldwin, USNR (R) W1IKE, and managing editor of QST, check results of armed forces ham operator contest.

Honor Division-of-the-Month

USS *William M. Wood* (DDR 715) has a traveling "E." It is stitched to a banner and it travels from one of *Wood's* divisions to another.

The "E," of course, stands for excellence. Each month, every division's letters of commendation, individual achievements, advancements and commendations are toted up as credits.

The debit side of the ledger shows disciplinary actions, sloppy uniforms and other nasties.

The debits are subtracted from the credits and the division with the highest score gets the "E" banner.

There are advantages other than having custody of the banner for a month and having your division listed on a quarterdeck plaque. For instance, the winning division gets a dinner in its honor and something else—first loading in the liberty boat for 30 days.

Crusader Flies in French

It is possible that the U. S. Navy's F8U *Crusader* jet fighter may also become familiar to the French navy.

The French watched the *Crusader* in action during the March NATO exercises. They liked what they saw and wondered if it could take off and land on a French carrier.

The French were thinking of *Clemenceau*, a carrier having a standard displacement of 22,000 tons. During the March exercises, the *Crusaders* used USS *Saratoga* (CVA 60) as a base. *Saratoga's* standard displacement is nearly three times that of *Clemenceau*.

BuWeps was asked to investigate the compatibility of the F8U with the catapults and arresting gear aboard *Clemenceau*.

Deck handling, maintenance, catapult and arresting teams were borrowed from *Saratoga* and a series of touch-and-go landings, ten arrested landings and ten catapult shots were made by a *Crusader* using *Clemenceau's* flight deck.

The trials were highly successful; the big question now is: Will the F8U *Crusader* also be known as Le F huit U *Croisé*?

Something to Crow About

As the results of last February's Fleet-wide exams were posted on bulletin boards throughout the Navy, many men had something to crow about. So did many commands.

Representative of the land, sea and air commands which joined in the chorus of *Impressive Advancement Statistics* were the Naval Communication Station, Port Lyautey, Morocco; USS *Atakapa* (ATF 149); and the air patrol squadron, VP 24, which is based at Norfolk, Va.

- At Port Lyautey, 14 Communication Station PO1s were advanced to Chief last May—the largest group since the COMSTA opened in 1954, and claimed as a record for a unit of its size.
- Twenty-two of *Atakapa's* crewmen were advanced—one third of the entire crew.
- VP-24 had 51 advances in May —20 per cent of the squadron's enlisted complement.

Other commands are singing along.

Uncle Sam's Hams Are Fast

Ham radio operators really showed their stuff when they took part in the annual military-to-amateur cross-band communication tests this year. The test results, pointing up the effectiveness of our amateur radio operators in this year's Armed Forces Day contest, have now been released.

The Washington, D. C., military stations WAR, AIR and NSS, averaged more than five contacts a minute for the sustained operations and had 4161 QSOs (positive contacts with radio stations) during the 13 hours and 45 minutes devoted to this phase of the program.

In SecDef message competition, there were 575 perfect CW copies and 329 perfect RTTY copies.

The SecDef CW message, sent at 25 words a minute, praised amateur radio operators for contributing to technical knowledge, as well as their part in the successful launching of the *Oscar* satellite in December 1961. *Oscar*, carrying an amateur radio, was sponsored by amateur radio enthusiasts.

The SecDef RTTY message, sent at 60 words a minute, gave recognition to the emergency public service potential of amateur radio operators and commended each for his accomplishments.

QSL cards have been mailed to all contacts that could be identified in the summer 1962 issue of the Call Book. If you have not received your card, you should request confirmation from the Armed Forces Day Contest, Room 5B960, the Pentagon, Washington, D. C.

Plans are being made for next year's contest to be held 18 May.

Star Gazing at Hat Creek

Far from being earthbound, the Navy's interests extend into space to the outer reaches of our galaxy and beyond. Helping to satisfy these interests is an 85-foot radio telescope recently dedicated at Hat Creek, Calif.

Among the larger steerable radio telescopes in the world, it will be operated by the University of California with the support of the Office of Naval Research.

The telescope's first project will be a mapping of our own galaxy, the island of stars and gases of which our solar system is a part.

The antenna has been specially designed to make measurements of the clouds of hydrogen which are thought to make up a large part of the matter in space. By studying these clouds the Navy hopes to make available new information on the shape of our galaxy, its dynamics, and how stars are formed.

A future project of the telescope will be to study the hydrogen clouds which are remnants of exploding stars (called supernovae) in our galaxy. The 85-foot dish reportedly can study the history of a star from its birth to its violent death.

The facility at Hat Creek also includes an ONR-sponsored 33-foot radio antenna, used for testing equipment designed for the larger dish, preliminary mapping of galaxies and training for graduate students. It will also be used in conjunction with the larger instrument to aid in pinpointing distant radio sources.

The Hat Creek radio telescope is one of four major radio dishes operated by universities with the support of ONR, which has been conducting a radio astronomy program since 1947. Others are at Peach Mountain, Mich., operated by the University of Michigan; at Owens Valley, Calif., operated by the California Institute of Technology; and near Danville, Ill., operated by the University of Illinois.

From CV to CVA to CVS

USS *Intrepid* (CVS 11)—the "Fighting I"—has begun a third career, and at an age (comparatively) when many an old girl is thinking more in terms of retirement and a life of ease.

When *Intrepid* returned to Norfolk last spring from a seven-month cruise with the Sixth Fleet in the Mediterranean, she ranked as Uncle Sam's oldest attack aircraft carrier in commission. Her story really starts much earlier than that, however—as CV 11 she won five battle stars in the Pacific during World War II.

A stint in the Mothball Fleet followed her wartime service. Then, in 1954, she was recommissioned as a CVA, and has spent the past eight years alternating between the Second and Sixth Fleets.

Upon her latest return from the Med, *Intrepid* entered Norfolk Naval Shipyard for overhaul, repair and minor conversion. Now, as an antisubmarine warfare support carrier, she has joined the team of aircraft carriers, destroyers, submarines and patrol aircraft which guards the shores of the United States.

RETIRING—A veteran of 21 years' continuous active service, the destroyer tender *USS Hamul* (AD 20) joins the Pacific Reserve Fleet.

Isle Royale Inherits Crew

One old ship faded away while another made a comeback in June at the Long Beach, Calif., Naval Shipyard. To hold confusion to a minimum, the 665-man crew from the retiree was simply transferred intact to the reharnessed warhorse.

USS *Hamul* (AD 20), which was decommissioned, is an old Eastern hand, having served the Navy from the Middle East to Korea for 21 years—ever since she was converted from a merchant ship in 1941.

Hamul has been in the Pacific Fleet since 1950 with her home port at Long Beach since 1952. She has been cited as the outstanding ship of her class in the Pacific Fleet and was awarded the Cruiser-Destroyer Force Battle Efficiency "E" twice consecutively.

USS *Isle Royale* (AR 29) inherits *Hamul's* crew. Although she was completed in 1946, *Isle Royale* is virtually a new ship, having logged only 65 hours before being placed in the Reserve Fleet at San Diego, Calif., at the end of World War II.

Tops in Accident Prevention

USS *Independence* (CVA 62) and *Essex* (CVS 9) have won the annual Admiral Flatley Memorial Award for accident prevention during carrier operations. Both are Atlantic Fleet carriers.

Named for the late VADM James H. Flatley, USN, the award is given to one attack carrier and one ASW carrier each year by the Chief of Naval Operations for furthering the naval aviation safety program.

The landing accident rate for both the Atlantic and Pacific Fleets was lower this year than for the same period last year. Runners-up in the competition are two Pacific Fleet carriers, USS *Bon Homme Richard* (CVA 31) and *Hornet* (CVS 12).

Ney Awards

The Navy's guide to good eating—the Edward Francis Ney Memorial Awards—this year singled out the Fleet oiler USS *Kawishiwi* (AO 146) as having the best general mess afloat. The Naval Air Station, Miramar, Calif., shared the honors in the shore category.

The afloat runners-up for fiscal year 1962 are the Pacific Fleet heavy cruiser USS *Helena* (CA 75), the Atlantic Fleet destroyer USS *Decatur* (DD 936) and the command ship USS *Northampton* (CC 1) of the Atlantic Fleet.

The Naval Air Station at Patuxent River, Md., and the Naval Station at Argentia, Newfoundland, were runners-up in the shore category.

The Edward Francis Ney Awards were established in 1958 by the Secretary of the Navy to give recognition for outstanding preparation and service of food on board Navy ships and shore installations.

The award is named in honor of the late CAPT Edward Francis Ney, SC, USN, who was head of the Navy Bureau of Supplies and Accounts during World War II.

All Ney award winners and runners-up receive trophies.

ELEVENTH Naval District rifle team displays first place trophies won in All-Navy rifle and pistol match.

Navy's Big Shots Meet in West

THE 1962 ALL NAVY Rifle and Pistol Championships at San Diego, Calif., produced a near-sweep by Eleventh Naval District-based contestants. In contrast to the 1961 meet at NAS Jacksonville, Fla., however, when the Potomac River Naval Command's LTJG Joel Sexton copped all three individual titles, this year's honors were well spread out.

Complete tourney results:

Individual Pistol (Possible 300) First—AMC Robert J. Murphy, USN, NTC San Diego (286); Second—ADRC Leland W. Melching, USN, NAS Moffet Field, Calif., (282).

Individual Rifle (Possible 250) First—EOC D. S. Morine, USN, NTC San Diego (246-24V); Second—AMC R. C. Edwards, USN (Ret.), Memphis, Tenn. (246-19V). Note: Chiefs Morine and Edwards finished with identical 246 scores, but Morine was awarded first place on the basis of scoring more "V's"—hits in innermost part of the bull's-eye.

Aggregate (Combined Pistol and Rifle Scores—Possible 550) First—AMC J. J. Galica, USN, NAS Jacksonville, Fla., (275-237—512); Second—MMCS O. A. Martini, USN, NTC San Diego (273-235—508).

Team Pistol (Possible 1200) First—Naval Air Force Pacific. Team members were: CDR A. J. Papageorge, USN (Team Captain), ComNavAirPac Staff; ADRC L. W. Melching, NAS Moffet Field; AKC J. E. Barcus, ComNavAirPac Staff; AD2 H. D. Self, VU-3, NAS North Island; AE1 H. M. Hartley, VA-122, NAS Moffet Field; and AEC W. J. Newton, VS-41, NAS North Island (Alternate). Team total was 1094x1200. Second—Submarine Force Pacific. Team total—1070x1200.

Team Rifle (Possible 1500) First—Eleventh Naval District. Team members: YN3 (W) M. J. Johansen, (Team Captain), EOC D. F. Morine, EMCM H. E. Miebs, EMC J. E. Winnings, DC2 V. M. Rothman, MMCS J. O. Blankenship and BM1 C. A. Boatright, all of NTC San Diego; EN1 T. R. Fasy, NavSta Long Beach and SHC R. N. Turnipseed, Headquarters, 11ND (Team Coach). Team total was 1420x1500. Second—NavAirPac. Team total—1409x1500.

CAPTAIN of AirPac's pistol team accepts first place trophy from Vice Admiral C. E. Ekstrom, USN.

Chief of Naval Operations Combat Rifle Team Match (Note: No definite possible score is established for this match, since scoring is based on distance as well as accuracy.) First—Pacific Fleet. Team members: SHC Turnipseed (Team Captain); BM1 Boatright; TM2 G. W. Bond; RM1 (SS) S. W. West; FTC (SS) G. W. Pittenger; AG1 D. L. Poorboy, and LTJG G. E. Miller. Team total was 789. Second—Atlantic Fleet. Team total—686.

Nearly 200 of the Navy's top shooters competed for All-Navy honors this year. They included the cream of the crop from each Fleet (Type, District and Fleet eliminations were staged earlier in the summer) and those Navymen holding "Distinguished" credits or National Rifle Association "Masters" classifications. After smoke had cleared the rifle and pistol ranges, top scorers at San Diego packed up their shooting irons and moved on to further competition in the month-long National Matches at Camp Perry, Ohio.

—Jerry McConnell, JO1, USN

All-Navy Bowling, Tennis and Golf

TROY DAVIS, a Norfolk-based gunner's mate third class who can really zero in on a head-pin, has captured his second straight All-Navy Bowling championship.

Representing the Atlantic Fleet Region, the ComDesFlotFour Navyman spread-eagled the field as he toppled 3626 pins (for a sparkling 201-plus per game average) during the three-day, 18-game All-Navy meet at Pearl Harbor. The Stillwater, Okla., native's final total gave him a healthy 81-pin bulge over runner-up Charles McElhaney, an NAS Barber's Point chief air controlman.

Meanwhile WAVE Dorothy Thompson, a yeoman second class serving on the staff of ComOpTevFor, NAS Norfolk, rallied strongly from a miserable start to top four North Atlantic Region standard-bearers for the Women's Division title, and give LantFlt Region a clean sweep of top Navy bowling honors.

YN2 Thompson's 3168 total pinfall just did edge her into the throne room by a slim 12 pins over ComFour's Communications Technician First Class Debbie Debevec.

Twenty men and 16 women (South Atlantic Region did not send a women's contingent) went to the firing line in this year's tourney.

LantFlt team-mate Senior Chief Sonarman Norm Nicholson, a former two-time (1959-60) champ, trailed Davis by 58 pins after two rounds, but sloughed off badly himself the final day and finished third. McElhaney, meanwhile, bombed away for a big 1220 last-day set.

Two other Pearl Harbor-based sailors—Ship's Serviceman First Class Roy Doss and Yeoman First Class Donald Cass—finished fourth and fifth, respectively, to give the home-standing WestPac Region three of the top five placers.

Davis's second-round 1240 stood up as the tournament's highest six-game block, while Cass posted the high single—a 247.

Women's division action took a completely oposite tack, furnishing 50th state bowling fans with an exciting battle every step of the way. It provided the spectacle of all four NorLant Region entrants waging a real donnybrook for the top rung over the entire 18-game grind—only to see LantFlt's Thompson bang out a high-for-the-meet 1164 second round set to climb from 14th to fourth place, then post a pressure-packed 1088 series the final day to grab the crown.

Yeoman Second Class Monie Moynahan, a Headquarters ComNine contribution to the NorLant squad and pace-setter through the first two rounds, tailed off to a final-day 994, and finished third.

All-Navy Tennis

LT Richard Gaskill, USN, an Attack Squadron 44 flier representing NAS Jacksonville, Fla., and the South Atlantic region, bowled over four straight opponents to win the 1962 All-Navy open singles tennis title at NavSta, Newport, R. I.

LT Gaskill, a former Naval Academy star, knocked off the Navy's all-time-champ court "bridesmaid"—Senior Chief Aviation Machinist's Mate Leon Wilson—6-1, 6-2, 6-2 in the finals, thus extending that veteran CPO's amazing saga of frustration. It marked the fourth time in the past eight years that the tennis-playing senior chief has finished in the All-Navy open singles runner-up spot.

In other action, meanwhile, PacCoast's LCDR Elston Wyatt, perennial All-Navy net star (he was Captain of the 1943 Naval Academy team which won the national intercollegiate title) captured the lion's share of senior division honors in a repeat of his 1961 showing. He swept aside SoLant's Chief Aviation Fire Control Technician Jack Candland, 6-0, 6-1 for the senior singles crown, then teamed with CDR William Foulker to crush LantFlt's CDR Burt Smith and CDR E. A. Hamblen, 6-1, 6-1 in the senior doubles finale.

SoLant's Yeoman First Class (W) Jean Farrington successfully defended her women's division singles championship with a rousing 6-4, 6-4 final round triumph over ENS Betty Wylie of NorLant. Miss Farrington then joined Aviation Storekeeper Third Class Margaret Ward in a 6-1, 6-0 romp over two yeomen second class from PacCoast—Sharon Drake and Patricia Dreier—for the women's doubles title.

LT Gaskill, LTJG Bard, Chief Wilson, ENS Karns, LTJG John Oettinger and Seaman James Whitehead from the open division, and CDR Smith and CPOs Candland and Roth were named to the Navy team scheduled for later interservice competition at Ft. Benning, Ga.

All-Navy Golf

Aviation Structural Mechanic Third Class Earl A. Fennell, USN, is the 1962 Open Division All-Navy golf champion.

Fennell, from NAS Oceana, Va., and representing the South Atlantic Region, posted successive rounds of 73, 71, 72 and 68 over San Diego's beautiful 6560-yard Mission Gorge course. His four-under-par final total of 284 over the 72-hole grind gave him a three-stroke bulge over the Pacific Coast Region's Dentalman Dick Hanscom of NAS North Island.

Two PacCoast Region stalwarts—NTC San Diego's CWO Dudley Jones and Personnelman First Class (W) Estelle St. Clair—copped seniors' and women's division honors, respectively; CWO Jones with a 73-79-72-77-301 showing, and Wave St. Clair with a tense second-extra-hole sudden-death playoff victory over WestPac's LT Nancy Hollenbeck, after the two racked up identical 72-hole totals of 355.

SoLant's Fennell never led until the final round in triumphing over a tough open-division field. His first-round 73 left him trailing teammate Master Chief Aviation Structural Mechanic Ben Jennett of NAS Cecil Field, Fla., by four strokes. NAS North Island's Seaman Charles DeLucca grabbed the 36-hole lead with a 142, while Fennell rested in a four-man second-place tie, two strokes back.

Third-round results set up a real traffic jam at the top, as Jennett, Fennell, Hanscom and WestPac's Chief Electronics Technician John Kalinka knotted up in a four-way tie for first with 216's, while DeLucca and LT Fred Blackmer of NAS Corpus Christi, Tex. (SoLant Region), were just one stroke further back.

Fennell's scorching 68 over the final 18 holes proved too much for the other contenders to match, however. Hanscom's fine 71 still left him three strokes down at 287, while Jennett, with a 73, finished third with 289.

A total of 27 men (18 open and 9 seniors) and 12 women, all of whom had survived earlier district and regional elimination tournaments, participated in this year's All-Navy meet.

Brief news items about other branches of the armed services

PERHAPS FISHERMEN in the North Pacific and Bering Sea will soon be thanking the U. S. Coast Guard for larger catches. The Coast Guard icebreaker *Northwind* (WAGB 282) is gathering information on the Oyashio current, important to the fishing industry in that area.

She is being aided in this year's patrol by the long-range navigation aid, Loran C. Loran C enables precise positioning of the ship, allowing her to plot ocean currents and bottom contours with accuracy. The Loran C radio waves are broadcast from Point Clarence, Alaska, about 100 miles from the Siberian mainland.

Later, *Northwind* will move north, gathering data at 75 oceanographic stations in the Gulf of Anadyr and the Northern Bering Sea, an area important to the nourishment of marine life. *Northwind* will stop at each station about three hours while scientists take bottom samples and make measurements of water salinity, temperature and dissolved oxygen content.

During the third phase of the survey, *Northwind* will gather similar data from stations north of Siberia and Alaska in the Arctic Ocean. She will also resupply the United States station on Ice Island T-3, 800 miles from the North Pole.

* * *

THE ARMY HAS DEVELOPED a new 10-pound combat radar unit which can be aimed like a flashlight to detect targets over a mile and a quarter away.

First experimental model of the new radar, designed by the U. S. Army Signal Research and Development Laboratory, Fort Monmouth, N. J., is contained in a box about the size of a portable typewriter. Held like a submachine gun, it is fitted with a pistol grip to aid in aiming the search beam. Controls are within easy reach on the back surface.

The new radar ignores stationary features, and picks out only moving objects. It can perform its detection through fog, darkness and light foliage.

When a moving object, which produces its own characteristic sound, passes through the radar's invisible beam, the unit emits an audible signal. The experienced operator can readily distinguish between the two-pitched sound of a tank, caused by the separate motions of the vehicle body and its track; the single whine which varies with speed and which means a jeep or truck; and the distinctive sound created by the leg and arm movements of walking men.

ON THE DOUBLE — USAF flight crews rush to bombers during 'alert' training at Offutt AFB, Omaha.

First radar of its kind light enough to be carried and operated by a single soldier, it employs miniature circuitry throughout, and contains only two tubes. All other tube functions are performed by tiny transistors and other semiconductor devices.

The entire system is powered by a lightweight belt battery that will last through at least 12 hours of continuous operation.

* * *

THE NORTH AMERICAN AIR DEFENSE COMMAND detected more than 20 new earth satellites in just one day last summer—an increase that was explained as old ones becoming new ones overnight. The "new" satellites had been orbiting the earth for some time, but were not counted individually. They were pieces of space junk, or material which goes into orbit along with payloads.

On 28 June, NORAD's Space Detection and Tracking System scoreboard at Colorado Springs, Colo., showed 177-man-made satellites in orbit around the earth. Of these, 42 were payloads; the remaining 135 were pieces of space junk. On 29 June, the scoreboard listed 199 orbiting objects.

It turned out that more than 20 pieces of junk from the Omicron satellite which exploded in space when it was orbited two years ago had moved apart far enough to be tracked and tabulated as individual satellites.

* * *

AS SPACE VEHICLES grow larger and more complex, their crews will also grow larger. How would several men in a space ship function as a team in space?

Six volunteers from the U. S. Air Force Academy have completed a psychological experiment which shows—from first indications—that a crew of astronauts can perform well as a team.

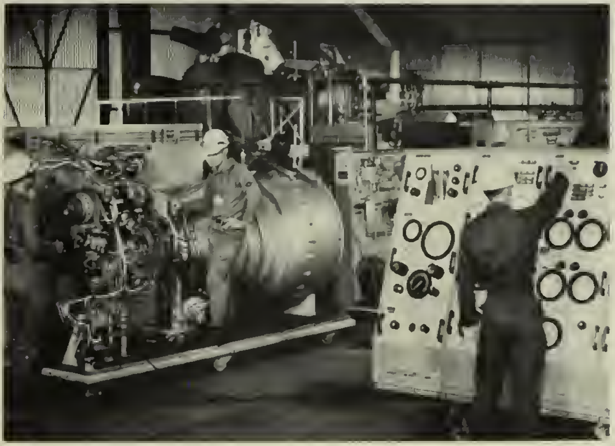
In a study conducted by a private corporation for the Air Force's Aerospace Medical Division, six 20- to 22-year-old Air Force cadets were confined for 15 days in a crew compartment.

The cadets performed operator duties for four hours, and were off duty two hours, around the clock. While on duty, they sat at flight stations, operating consoles in order to solve problems fed to them electronically by psychologists.

The problems involved numbers, hearing, and perception, and required the crew to work together to solve them. Although these tasks were not identical to those required in a space flight, they exercised the same mental processes that would be demanded of the crew.

One of the major findings of the study was that six men were able to perform 16 hours a day on a heavy work schedule in a confined area, and upon leaving were confident they could have continued even longer.

The studies will help the Air Force determine how much efficient work an individual or a crew can do in future space travels. By reducing the number of men needed in a crew, the space vehicle's weight can be kept at a minimum, requiring less thrust at launching.



FUTURE USAF missile mechanics work with *Atlas* missile operational training aids at Chanute AFB, Ill.

In mid-June, a 28-million candlepower light flashed from Sullivan's Island on the north side of the Charleston, S. C., harbor entrance.

It is visible for 19 miles at sea and is, according to the U. S. Coast Guard, the most powerful light in the Western Hemisphere.

The new lighthouse was built to replace its 86-year-old predecessor which fell victim to time, erosion and hurricanes.

The original lighthouse was built on the shore but, after time and erosion had run their course, it ended up a quarter of a mile off the coast.

The new lighthouse is somewhat unusual in design and equipment. It is triangular, has an elevator and a 70-mile sequenced radiobeacon.

It is one of more than 40,000 navigation aids operated by the U. S. Coast Guard. It is expected to last for 75 years with a minimum of maintenance.

★ ★ ★

The LARC 15, the Army's new diesel-powered, all-aluminum amphibian, has completed land mobility and heavy surf tests in the Pacific Ocean at Coronado, Calif.

Before the Coronado tests, which were held at the Naval Amphibious Base, the amphibian underwent general shakedown tests in the Indianapolis, Ind., area, and environmental and mobility tests at the Army Desert Test Center, Yuma, Ariz.

The LARC 15 (Lighter, Amphibious, Resupply, Cargo) is the middleweight of the Army's new family of amphibious craft. It is capable of transferring 15 tons of cargo from shipside through the surf zone, past the beach line to a transfer point as far as six miles inland. Its smaller counterpart, the five-ton LARC 5, went into production in June 1961. The 60-ton BARC, largest of the family, has been in production for some years.

LARC 15's water speed is about twice that of the World War II DUKW, while it carries six times the amount of cargo. The LARC 15 is 45 feet long, 12 feet-six inches wide and 13 feet-four inches high. It has an aluminum hull which is fitted with a bow ramp for rapid loading and unloading of vehicular cargo. The amphibian is equipped with 24 x 29, 16-ply low-pressure tires. All four wheels drive, giving it excellent maneuverability on the beach. In the water, the craft is driven by a single propeller installed in a hull tunnel. Fully loaded, it is capable of speeds of ten miles an hour in water and more than twice that speed on land.

★ ★ ★

The air force has added nine more two-stage *Titan* missiles to its mixed force of intercontinental ballistic missiles and manned bombers. The second squadron of *Titan* ICBMs, located near Lowry Air Force Base, Denver, Colo., has been declared operational by the Strategic Air Command.

This second *Titan* squadron gives the Air Force 18 operational *Titan* missiles, all in underground, protected silos and capable of rapid firing. Additional *Titan* I squadrons are expected to become operational with SAC some time this year at Ellsworth AFB, Rapid City, S. Dak.; Mountain Home AFB, Idaho; Beale AFB, Marysville, Calif.; and Larson AFB, Moses Lake, Wash. A *Titan* missile can strike a target more than 6300 miles away in a matter of minutes after it leaves the launching pad.

Acceptance of the second operational *Titan* squadron by SAC from the Ballistic Systems Division of the Air Force Systems Command came only two weeks and six days after the turnover of the first operational squadron at Lowry AFB.

Before the end of this year, the Air Force expects to have operational: 13 *Atlas* squadrons, six *Titan* squadrons, and the first squadron of *Minuteman* solid-propelled three-stage missiles.

★ ★ ★

The army has established an Aeromedical Research Unit at the Army Aviation Center, Fort Rucker, Ala.

The new unit will be the central Army reference center for literature on aeromedical problems and, along with medical studies in connection with rotary and small fixed wing aircraft, will provide medical and technical support for Army aviators.

The unit is an activity of the U. S. Army Medical Research and Development Command of the Medical Corps. It will study problems specifically related to Army aviation which are occasioned by the steady increase in number of aircraft and aviation personnel.

ARTIST'S concept shows vehicle-mounted *Shillelagh* weapons system being developed for the U. S. Army.

THE WORD

Frank, Authentic Advance Information On Policy — Straight From Headquarters

● **UNIFORM CHANGES** — Chiefs and officers are authorized to wear a new single-breasted lightweight blue raincoat as an optional part of their uniform beginning the first of this month. The raincoat will be beltless, box-style with a three-button front fly closure and open-through welt pockets. (This change is not applicable to the women's uniform.)

Beginning 1 Jul 1963, two tropical white shirts will be part of the minimum uniform for all Navymen. When the white shirts become part of the required uniform, enlisted men below chief may reduce the number of jumpers in their seabag from four to three.

The new ratings of AX (Aviation Antisubmarine Warfare Technician) and DS (Data Systems Technician) have been given specialty marks effective 1 Jan 1963. AX is a lightning bolt above and pointing down toward a water surface, with a winged arrow below the water pointing downward.

The DS specialty mark is a helium atom with three surrounding arrows pointing toward its center and one pointing out from it.

● **ECONOMY TRAVEL** — Navy and Marine Corps sponsored air travelers are henceforth going to fly "economy class," rather than first class, except in certain cases.

SecNav Inst. 4632.3 points out that the policy of authorizing first class accommodations for persons traveling on government orders was adopted before the advent of commercial air travel.

Since the only difference between first class and less than first class air travel is usually only the difference between sitting three rather than two abreast; eating roast beef in flight instead of filet mignon and drinking ginger ale instead of champagne, SecNav feels the prestige of most travelers would be undamaged by the use of less than first class facilities.

The economies are extended to Navymen, Marines, civilian employees, and their dependents when traveling by air. They will be expected to use MATS facilities (including commercial facilities under contract to MATS) for all or a substantial portion of their oversea travel. If MATS transportation is unavailable, less than first class commercial facilities should be used.

There are exceptions to the rule. First class may be used by the traveler:

- Whose level of responsibility or whose business dictates it,
- When first class accommodations are all that are available,
- When use of less than first class would require circuitous routing,
- When use of less than first class accommodations would require travel to begin between 2400 and 0600 or
- Would result in additional direct costs which would offset the saving.

All requests for first class travel (including jet) must be submitted through official channels. When approval is granted, the traveler's orders must bear a notation to the effect that first class is authorized.

● **STAR PROGRAM REVISED** — The STAR program has been revised to make STARs of men who are of higher-than-average caliber, thus giving the Navy a greater return on its training investment.

Here are some salient features in the revised program:

If you reenlist under the STAR program in the future, you will find that the minimum hitch is for six years instead of the former four. This will make longer term training possible.

As of the first of this month, a minimum of one year of naval service and a maximum of three years of active duty in any military service are the limitations for reenlistment under STAR.

For outstanding E5s, the maximum is extended to three years and six months.

Commanding officers no longer have authority to approve reenlistments under the STAR program, even if the applicant is in a critical rating. All applications must now have BuPers approval.

Automatic promotion from E-3 to E-4 is different (perhaps easier). Under the new program, if your final grade, upon graduation from Class A school, is higher than the average of all the previous year's classes, you are eligible for automatic promotion.

The purpose of the STAR program, as almost everyone knows, is to single out, early in his first enlistment, the man who intends to make the Navy his career.

SHOW THE PROPER SPIRIT . . . 9 others are waiting to be brought out of the darkness with this issue.

To protect the Navy from the possible loss of good prospects because of tighter requirements, BuPers has requested commanding officers to continue recommending outstanding men who want to get into STAR, even though they may lack some of the qualifications.

The CO must submit evaluations of STAR candidates with their applications. The evaluation will pull a lot of weight with the selection board.

Full details of the revised STAR program are in BuPers Inst. 1133.13B.

• ARMED FORCES EXPEDITIONARY MEDAL—Last December, an Executive Order established the Armed Forces Expeditionary Medal. More recently, conditions under which the medal can be earned have been published.

There are three different categories of operations for which this medal is authorized after completion of the required period of service in the area. They are:

- United States Military Operations. If you served in Berlin after 14 Aug 1961; in Lebanon from 1 Jul 1958 to 1 Nov 1958; in Quemoy and Matsu Islands from 23 Aug 1958 to a date yet to be announced; or in the Taiwan Straits from 23 Aug 1958 to 1 Jan 1959, you are eligible for award of the Armed Forces Expeditionary Medal.
- United States Operations in Direct Support of the United Nations. If you participated in U. S. operations in direct support of the United Nations in the Congo from 14 Jul 1960 to a date yet to be announced, you are eligible under this category.
- United States Operations of Assistance for Friendly Foreign Nations. This category covers you if you participated in U. S. operations for friendly nations such as Laos and Vietnam.

If you served in Laos from 19 Apr 1961 to a date to be announced, and in Vietnam from 1 Jul 1958 to a date to be announced, you are eligible.

To qualify for the award, you must have been a bona fide member of a unit engaged in any of the above operations or must meet at least one of the following requirements:

- Have served at least 30 consecutive days in the area of operations.
- Have been engaged in direct support of the operation for at least 30 consecutive days or 60 nonconsecutive days provided this support involved entering the area of operations.
- Have served for the full period when an operation is of less than 30 days' duration.
- Have been engaged in actual combat or duty as hazardous as combat duty during the operation with armed opposition regardless of time or place.
- Have participated as a regularly assigned crew member of an aircraft flying into, out of, within, or over the area in support of the military operation and
- Have been recommended or attached to a unit recommended by the chief of a service or the commander of a unified or specified command for award of the medal, although the criteria above have not been fulfilled.

The Armed Forces Expeditionary Medal takes precedence immediately after the Antarctica Service Medal and will be awarded only for operations for which no other United States campaign medal is approved.

• SCORE CHANGES—The SCORE program has undergone some minor changes since it was described in the December 1961 issue of ALL HANDS.

CTO and MR have been removed from the list of ratings to which conversions are desired.

A special enlisted evaluation sheet must now be submitted to the commanding officer by the SCORE counseling officer after you have been interviewed. Marks assigned in the special evaluation sheet will not be entered in your service record, but the evaluation sheet will be submitted to the Chief of Naval Personnel along with the request for SCORE conversion.

You are now permitted to extend your enlistment to fulfill your six-year obligation. This removes the requirement for reenlistment and the possibility of having to repay a previous reenlistment bonus. Approval to extend the enlistment will be granted by the Chief of Naval Personnel along with approval for conversion.

The SCORE program is now set forth in BuPers Inst. 1440.27A, cancelling the original instruction.

QUIZ AWEIGH

If you're a petty officer, you may be assigned to a shore patrol unit. For that reason, you should know the responsibilities of an SP. Here are a few situations that may arise.

1. The booklet, *The U. S. Navy Shore Patrol* (NavPers 10095.A) has recently been revised. Chapter one lists the missions of the shore patrol. Which one of the following is not a listed mission? (a) Fosters the welfare and general well-being of enlisted men in a liberty status, (b) Assists military personnel by furnishing travel information and interpreting travel orders, (c) Directs vehicular and pedestrian traffic as required by emergency, or (d) Enforces civil law among the populace if no civilian police are immediately available.

2. Under what circumstances would you, as a shore patrolman, be authorized to apprehend a civilian? (a) Only if you see a citizen committing an aggravated act which constitutes a breach of the peace or a felony, and you cannot contact the local police, (b) Anytime to prevent a situation from developing which could endanger servicemen, (c) Only on a public street, or (d) Only if the civilian prevents you from performing your assigned duties.

3. You are in a foreign port and observe a Navyman having a dispute with a cab driver. As a shore patrolman you should: (a) Insist that the Navyman comply with the cab driver's wishes in order to better people-to-people relationships, (b) Call a local policeman and then maintain order until he arrives, (c) Take the part of the Navyman and help your shipmate in his plight, (d) Listen to both sides and arbitrate.

4. A shore patrolman can ask for assistance when necessary from what other military personnel? (a) Only men who are equal in rate or rank or junior to him, (b) Only enlisted personnel, regardless of rate, (c) Any military personnel, whether they are commissioned or enlisted, (d) Only men who are senior to the accused.

ANSWERS MAY BE FOUND ON PAGE 49

THE BULLETIN BOARD

Plenty of Leadership Assistance Available If You Need It

NAVAL LEADERSHIP is based upon personal example, good management practices and acceptance of moral responsibility—and the ideal leadership program is the practical everyday exercise of good leadership.

Almost anything can always be improved—and in the case of those charged with the exercise of naval leadership who need to improve it within their command, help is available in several forms. Among these are BuPers leadership field teams, leadership schools and courses, correspondence courses, and films.

None of the above is new or startling—nor are most of the leadership aids we've just mentioned. Most of them have been around for some time. If you and/or your command have not yet taken advantage of them, why not try now? You'll find they can be of considerable benefit to your organization.

BuPers leadership field teams consist of specially selected officers and chief petty officers who have received specialized training in the use of leadership materials. They will visit and assist a command when requested, but it should be remembered that their function is purely advisory. They assist, *but do not substitute for,* an active command program.

Among the services provided by these teams are:

Command Counseling, in which a team will sit down with a commanding or executive officer and review an active or proposed command leadership program with an eye toward improving or expanding it.

Command Presentations, through which they explain the various materials and methods developed by BuPers for use in leadership training.

Training of Discussion Leaders, consisting of a short training period for interested commands, to instruct selected and motivated Navymen in the techniques of conducting group discussions on any of the suggested topics contained in the *United States Navy Leadership Manual* (to be distributed to all commands soon), and to demonstrate how command problems in leadership can be developed into discussion topics.

Area Seminars, staged for appropriate senior officers of several commands simultaneously, and aimed at stimulating interest in aggressive, systematic command leadership programs.

Here's Where to Look for Leadership Field Teams

Field Team Address	*Areas of Responsibility*
BuPers Leadership Field Team, Alameda c/o CO, U. S. Naval Air Station, Alameda, Calif.	12th, 13th and 17th Naval Districts.
BuPers Leadership Field Team, San Diego c/o CO, U. S. Naval Air Station, San Diego, Calif.	11th Naval District and New Mexico.
BuPers Leadership Field Team, Newport c/o CO, U. S. Naval Air Station, Newport, R. I.	First and Third Naval Districts; Newfoundland and Iceland.
BuPers Leadership Field Team, Norfolk, c/o CO, U. S. Naval Air Station, Norfolk, Va.	Fourth and Fifth Naval Districts, less Ohio and Kentucky; Bermuda; European and Mediterranean areas.
BuPers Leadership Field Team, Charleston c/o CO, U. S. Naval Air Station, Charleston, S. C.	Sixth Naval District, less Florida and adjacent Gulf Coast areas
BuPers Leadership Field Team, Jacksonville c/o CO, U. S. Naval Air Station, Jacksonville, Fla.	10th and 15th Naval Districts; Florida and adjacent Gulf Coast areas west to and including New Orleans.
BuPers Leadership Field Team, Great Lakes c/o CO, Naval Administrative Command, U. S. Naval Training Center, Great Lakes, Ill.	Eighth Naval District, less New Mexico; Ninth Naval District, plus Ohio and Kentucky.
PacFlt Leadership Field Team, WestPac, c/o Commander, U. S. Naval Forces, Japan, Fleet Post Office, San Francisco, Calif.	Western Pacific.
PacFlt Leadership Field Team, MidPac, c/o Commander Service Force, Pacific Fleet, Navy No. 128, Fleet Post Office, San Francisco, Calif.	Hawaiian Area.

Commands desiring team services should address their requests to the appropriate team (see box), stating preferred date or dates, and the type of services desired. To reduce travel costs, commands and Reserve units should also inform their immediate superiors or senior local commanders so that other commands in the same general area can be informed and invited to be included in a coordinated schedule. An information copy of the request should be sent to the Chief of Naval Personnel (Pers 12).

Leadership schools and courses are provided by the Chief of Naval Personnel for officers in Officer Candidate courses, and in the various curricula offered at the U. S. Naval Postgraduate School. Leadership training for EMs is conducted in all Class B schools, and at the three Class C leadership schools located at Norfolk, Great Lakes and San Diego. In addition, many type and unit commanders have established excellent leadership schools and courses of their own.

Among publications available are:

- *The U. S. Navy Leadership Manual (NavPers 15934)*—A compilation of leadership materials designed for ready reference. Much of the content is drawn from previously issued leadership publications which are no longer effective. It is in the printer's hands now and should be distributed this fall.

- *Principles and Problems of Naval Leadership (NavPers 15924)*—Intended primarily as an officer text to explain the principles underlying leadership problems, this book is also useful for petty officers. It contains 32 actual cases drawn from the experience of naval officers. Local problems can be analyzed in the same manner used for the cases in this book.
- *The Armed Forces Officer (NavPers 15923A)*—A guide to the philosophy, ideals and principles of leadership in the armed forces. This book was produced by the Department of Defense primarily for junior officers, but can be of value to all persons in the military services. The "A" edition is an improvement to the earlier version. It explains the meaning of a commission and the formation of military ideals and discusses leadership principles and their psychological foundations. Suggestions are included on writing, speaking, counseling and the handling of problems of discipline and morale.
- *Correspondence Course, Leadership (enrollees only) (NavPers 10903A)*—Course content is drawn from General Order 21; *The Armed Forces Officer* and *Principles and Problems of Naval Leadership.* These publications are used as texts. Enrollment in the course is accomplished by individual application on form NavPers 992 to the U. S. Naval Correspondence Course Center, Scotia, N. Y.

Films available are:

- *Leadership at the Top (MN-9635)* (13 min.-color)—The Under Secretary of the Navy reports on the leadership effort. There are scenes of the Department of the Navy Leadership Working Group and comments by the Chief of Naval Operations and the Commandant of the Marine Corps.
- *The Challenge of General Order 21 – (MN - 8829a)* (25 min. - color) (This is a 1958 movie which will be replaced soon.)—Explains the conditions which led to General Order 21 and the Naval leadership program, and shows how a command leadership revitalization effort can succeed. Useful before audiences unfamiliar with leadership program.
- *Case of the Early Leave (MN-829e)* (15 min.-B & W).
- *Case of the Unmoved Files (MN-8829f)* (15 min.-B & W).
- *Case of the Penurious Personnelman (MN-8829g)* (15 min.-B & W).
- *Case of the Unwashed Seaman (MN-8829h)* (15 min.-B & W).

These four films are based on cases from *Principles and Problems of Naval Leadership (NavPers 15924)*; they are designed to assist the leader to generate discussion around the leadership deficiencies portrayed in the films and to show how to develop a case study from a local command problem. All of the deficiencies of the characters are not mentioned in the narration. These additional deficiencies are designed to challenge the group's interest and alertness, as well as encourage further discussion. They are suitable for officer or enlisted discussion groups within a command.

- *The Truxtun Story (MN-8829d)* (28 min.-color)—Based on incidents from the life of CAPT Thomas Truxtun, the commanding officer of USS *Constellation.* It portrays the leadership qualities which CAPT Truxtun possessed. To be distributed this month.
- *The Farragut Story (MN-8829-l)* (28 min.-color)—Dramatically recounts incidents in the life of David

WHAT'S IN A NAME

How Burke Was Christened

By late 1943 American successes in the Solomons and elsewhere in the Pacific had helped put the war against Japan on a one-way street toward the enemy's home islands.

One of the battles of this era, which the Naval War College has called "The almost perfect surface action," was the Battle of Cape St. George.

It was incidental to this fight that Captain Arleigh A. Burke, later to become Chief of Naval Operations, was dubbed "31-knot" Burke.

On 24 Nov 1943, Admiral William F. Halsey ordered Captain Burke, who commanded Destroyer Squadron 23, "The Little Beavers," to intercept Japanese forces from Buka.

When the order came, only five of "The Little Beaver" squadron's destroyers were operational—USS *Converse* (DD 509), *Spence* (DD 512), *Charles Ausburne* (DD 570), *Claxton* (DD 571) and *Dyson* (DD 572).

***Spence* was having some trouble with a boiler tube but CAPT Burke ascertained that she would be capable of making 31 knots. To do that, however, she would have to cross-connect her power plant, a technical violation of regulations, since a cross-connected plant was more vulnerable in combat than the regulation split plant. Nevertheless, the Little Beavers had to take that chance. Burke ordered the ships underway.**

The Little Beavers' boss advised Admiral Halsey's headquarters of his squadron's status. In each communication Capt Burke had occasion to repeat that they were moving fast—"at 31 knots."

Then came a communication back from Admiral Halsey. It was addressed to "31-knot Burke." The name stuck.

At that time, Burke did not know the composition of the enemy force. It developed that it was an even match so far as numbers were concerned. When the gap between the Japanese and American ships was closed, two Japanese destroyers, which formed a forward screen, were quickly dispatched. The others began fleeing at 32 knots.

Destroyer Squadron 23 pushed its speed up—past the 31-knot level—to 33 knots and the gap between the pursuers and the pursued again closed.

When the smoke cleared away, three of the Japanese destroyers had been sunk; one was badly damaged and one escaped. Only one of "31-knot" Burke's destroyers had been damaged and not a single man had been lost.

Glasgow Farragut, our first admiral. It illustrates the leadership principles applied to his career which are as valid today as they were a century ago. It was distributed in September 1962.

- *Five Steps toward Effective Naval Leadership (MN-8829k)* (15 min.-color)—A filmograph outlining five simple steps by which a CO can implement a leadership program. To be distributed this fall.
- *An Aid to Group Discussion (MN-8829n)* (15 min.-color)—A filmograph used to demonstrate the group discussion technique. It outlines how group discussion can aid in implementing a naval leadership program by enabling people in small groups the better to understand common problems. To be distributed November 1962.

Additional publications may be requisitioned from the U. S. Naval Supply Center, Norfolk, Va., or Oakland, Calif., in accordance with *NavSandA Publication 2002 (Navy Stock List of Forms and Publications, Cog. I)*. Films are obtainable from Navy and Marine Corps film libraries and are held by major commands.

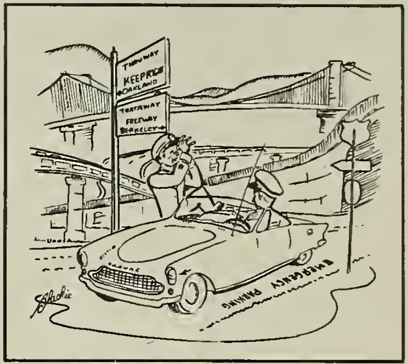
Striker Selection Board Helps SNs Choose Career

Non-rated men aboard the destroyer USS *Forrest Sherman* (DD 931) have the opportunity to weigh and evaluate carefully the rate in which they hope to work. No jumping blindly into a lifetime career for them.

The *Sherman* system of channeling men into the rating that is best for the individual, the ship and the Navy starts when a non-striker reports aboard. He is not told in which rate he will strike nor is he allowed to choose his own field immediately. *Sherman's* attitude is based on the conviction that a seaman apprentice fresh from recruit training isn't familiar enough with the Navy to choose a Navy occupation intelligently. For that reason, aboard *Sherman*, he is given a seasoning period in the deck gang.

This interim period topside usually lasts approximately three months. However this period may become longer or shorter. The longer periods are reserved for those who choose to strike for a deck rating or who fail to show sufficient interest in other fields, while the shorter periods go to those men who work hard at their assignment and also prepare themselves for a rating in which they hope to qualify.

All-Navy Cartoon Contest
Emmet J. Geisler, YN1, USN



"Alright now, you navigated across the Pacific; now get us on the other side of the bay!"

This period in the deck gang is important to the new Navyman. It allows him to learn the ship from the top down and also gives him time to watch other divisions at work. If he sees a job that appeals to him, he investigates.

It is the individual's responsibility to learn something about the job in which he is interested, check the minimum requirements for that rating, and decide if he would enjoy, and be able to do, the work. If he finds all these things in his favor, he breaks out a third class manual for that rating and learns more about the technical aspects of the work.

When he is convinced he has chosen the right rating, he submits a request to the executive officer for transfer to that department of the ship. This request is referred to the Striker Selection Board.

This board is made up of division officers and leading petty officers from each department of the ship. Usually about five officers and maybe five or six enlisted men sit on the board which meets whenever needed. These men are experienced in every phase of shipboard work and are ready and able to help the individual help himself.

The secretary of the board is the chief yeoman. He screens the applicant's service record and presents his case to the members of the board. When all the board members are familiar with the case—the individual's educational background, GCT, conduct, and experience—the young man is invited into the meeting to be interviewed by board members. The interview generally begins with the chief yeoman and then goes around to every member of the board.

Board members are interested in several things about this man. They want to know, for example, his reasons for wanting to strike for some particular rating. Are these reasons valid and is he more interested in this rating than several others which may be open to him? Advancement possibilities and pro pay, if applicable, are explained. This is also the time he may be questioned about his lack of education or lack of initiative. In other words, the board wants to make sure the man gets what is best for him.

The session before the Striker Selection Board is important for reasons other than selecting a rating for which to strike. If the young Navyman quit high school, he is encouraged to study and get his diploma. If he hasn't received his seaman correspondence course, he is encouraged to order it. In other words, this is an opportunity to impress on a young Navyman his responsibilities to himself and to the Navy.

Many men do not have their chits for transfer approved the first time before the board. The board is not just a formality before being transferred. If a man is allowed to transfer to a chosen department, it is because he has earned it. If he doesn't show enough initiative to impress the experienced Navymen on the board, he spends a little more time in the deck gang. Some men, however, prefer to stay in the deck gang. They like it.

A new man hears about the Striker Selection Board when he first comes aboard. Most men recognize the board as a means to their objective, but at the same time a group that will not give them anything they have not earned.

Forrest Sherman doesn't claim that her Striker Selection Board is unique. The idea was borrowed from another ship; they're not sure which one. Someone brought the idea aboard, it was adopted, and now is a routine part of shipboard life.

Investigate When Looking For A Place For Your Savings

EARLIER THIS YEAR a large number of state savings and loan associations in an eastern state went into receivership and the life savings of many Navymen went down the drain.

Here are a few things you should know about savings and loan and building and loan associations. A little knowledge and a wary eye will go a long way toward keeping the long green in a safe place for a rainy day.

Savings and loan (and building and loan) associations may be incorporated and supervised under either federal or state laws. These associations make real estate mortgage loans by investing other people's savings accounts.

All federally incorporated associations are supervised by the Federal Home Loan Bank Board and have their savings insured by the Federal Savings and Loan Insurance Corporation. Both of these organizations are agencies of the United States government.

The Federal Savings and Loan Insurance Corporation also insures the savings of many state incorporated associations, and the states of Ohio and Massachusetts have state insurance funds which insure savings of associations incorporated in these states.

Federal savings insurance is limited to $10,000 for each account name. Thus, a Navyman who is lucky enough to have sufficient money may maintain one insured account, his wife another, and the two jointly still another insured account.

Terms for acceptance of savings deposits, just as in the case of savings accounts of commercial banks, provide that the savings and loan association may defer withdrawals for a limited period when required.

Such deferrals are not to be expected except in extremely unusual circumstances. This provision is normal in all kinds of banks which receive savings for investment.

A SAVINGS AND LOAN association must receive sufficient interest income from its real estate loans and other investments to cover the dividend payments on its savings accounts, its operating expenses and a small margin to cover possible losses on its loans. Therefore, the interest rate which is charged on real estate loans automatically places a limit on the dividend rate which can be paid on savings accounts. Dividends credited to savings accounts (usually quarterly) have the effect of compound interest.

You may make an allotment to a savings and loan association, as one class of banking institution, for credit to your account. The allotment can be made for payment on a loan or for addition to your savings account. However, only one such allotment of this type is allowed.

The Navy Department cannot assume the responsibility for screening allotments to banking institutions to determine the character or quality of the allottee institutions. You must take this responsibility yourself.

While most savings and loans institutions are sound, the recent situation showed the necessity to be on guard. You should determine the reliability of any savings and loan association in which you invest and consider insurance limits as well as the general restriction on savings withdrawals.

FOR ALL PRACTICAL PURPOSES, reliable savings and loan associations generally may be considered to be those whose savings are insured by the Federal Savings and Loan Insurance Corporation, or those institutions in Massachusetts and Ohio that are insured under state insurance funds.

You are also cautioned to read

HOW DID IT START

Quonset

This year, Rhode Island's Quonset Point Naval Air Station observes its 21st birthday. In 1940, Quonset Point was a beach, with rows of summer homes. One year later, it had been transformed into a huge naval air station, destined to become one of the largest in the U. S.

Besides training hundreds of combat airmen for carrier duty in all theaters of war, Quonset Point repaired and rejuvenated hundreds of Navy bombers in its overhaul and repair department during World War II.

But perhaps the most famous of Quonset Point's accomplishments was the quonset hut, designed by a contractor who was building the naval air station in 1941. The arched-rib design was adapted from the English Nissen hut, used as a barracks for the British military. During World War II about 152,000 standard quonsets, 20 feet by 48 feet, were erected at naval and other military installations throughout the world. In addition, 17,000 utility type quonsets, 40 by 100 feet, were built. These structures served as hospitals, chapels, mess halls, recreation centers and wartime homes for American servicemen.

Throughout its 21-year history, Quonset Point has had its share of excitement. For example, on 26 May 1954, when USS *Bennington* (CVS 20) was shaken by a series of explosions about 75 miles south of Newport, R. I., Quonset Point dispatched every available helicopter to *Bennington* to assist in evacuating the casualties.

Hurricanes also caused excitement at Quonset Point from time to time. Among the infamous ladies calling at the air station were hurricanes *Carol* and *Edna* in August and September 1954. Both caused extensive damage to Quonset, drowning runways in towering seas, ripping buildings apart and knocking down power lines.

Quonset Point claims to be Rhode Island's largest single industry and has established itself as an integral part of the state.

carefully advertising or mail solicitations if you use these as a basis for selecting a savings and loan association for investment, and be on guard against offerings of unusually high interest rates and premiums.

In selecting a place to stash your savings, you will probably want to consider all kinds of savings institutions and other media. Here are a few:

- Many commercial banks have recently increased the interest rates allowed on savings deposits within the permissible limit. A higher rate may be allowed on deposits left for a year or more than on those which are subject to normal withdrawal.

  Here the insurance protection of the Federal Deposit Insurance Corporation is more or less general and should be looked for.
- U. S. Savings Bonds offer an excellent safe medium for accumulating savings. U. S. Savings Bonds currently earn 3.73 per cent interest, compounded quarterly, when held to maturity (seven years, nine months). A bond may be cashed at any time after 60 days from purchase, but only with reduction of the effective rate of interest.
- Navy savings, also representing a direct obligation of the U. S. government, accumulate at 4 per cent *simple* interest per annum until withdrawal.

  Except in hardship cases, such deposits cannot be withdrawn until separation, discharge and reenlistment, or expiration of a three-year period of any enlistment greater than three years. Four per cent simple interest for four years is equivalent to 3.79 per cent compounded quarterly.
- Investments in credit unions (generally in the form of purchase of shares) are much like savings accounts. Dividends are credited to the accounts, usually semiannually, and have the effect of compound interest.

  Credit unions are organized under both federal and state laws. While they are subject to governmental supervision, based upon periodic examinations, the share accounts or deposits are not insured.

  Credit unions are cooperative ventures which are based upon the philosophy of closer relations with borrowers and investors than is the case for other kinds of banks. You would be wise to know something about any credit union in which you invest.

Pay deductions for U. S. Savings Bonds and Navy Savings are authorized in addition to the one-allotment limitation to a service member for all kinds of banking institutions or associations.

List of New and Re-Issued Motion Pictures Available To Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Harold Lloyd's World of Comedy (2034): Comedy; Harold Lloyd.

Five Finger Exercise (2035): Drama; Rosalind Russell, Jack Hawkins.

Jack the Giant Killer (2036) (C): Comedy; Kerwin Mathews, Judi Meredith.

Desert Patrol (2037): Melodrama; Richard Attenborough, Jack Gregson.

Safe at Home (2038): Drama; Mickey Mantle, Roger Maris.

Rome Adventure (2039) (C): Troy Donahue, Angie Dickinson.

All-Navy Cartoon Contest
John R. Thornton, SOG2, USN

"Uh . . . Sir . . . that new Engineering Officer says we can't get underway right now . . . he's still looking for the ignition key to the main engines!"

Moon Pilot (2040) (C): Science Fiction; Brian Keith, Edmond O'Brien.

Cape Fear (2041): Drama; Robert Mitchum, Polly Bergen.

Zotz (2042): Comedy; Tom Poston, Julia Meade.

Escape from Zahrain (2043) (C) (WS): Drama; Yul Brynner, Sal Mineo.

Ride the High Country (2044) (C) (WS): Western; Randolph Scott, Joel McCrea.

Confessions of an Opium Eater (2045): Melodrama; Vincent Price, Richard Loo.

Hell is for Heroes (2046): Drama; Bobby Darin, Steve McQueen.

Lucky Nick Cain (2047): Drama; George Raft, Coleen Gray (Re-issue).

I Can Get it for You Wholesale (2048): Drama; Susan Hayward, Dan Dailey (Re-issue).

For Heaven's Sake (2049): Comedy; Clifton Webb, Edmund Gwenn (Re-issue).

The Steel Trap (2050): Drama; Teresa Wright, Joseph Cotten (Re-issue).

Lonely are the Brave (2051) (WS): Drama; Kirk Douglas, Gena Rowlands.

Reprieve (2052): Drama; Ben Gazzara, Stuart Whitman.

Three on a Spree (2053): Comedy; Jack Watling, Carole Lesley.

The Man Who Shot Liberty Valance (2054): Western; John Wayne, James Stewart.

The Horizontal Lieutenant (2055) (C) (WS): Comedy; Jim Hutton, Paula Prentiss.

The Notorious Landlady (2056): Comedy; Kim Novak, Jack Lemmon.

The Boy Who Caught A Crook (2057): Melodrama; Wanda Hendrix, Don Beddoe.

Road to Hong Kong (2058): Comedy; Bob Hope, Bing Crosby.

That Touch of Mink (2059) (C) (WS): Comedy; Cary Grant, Doris Day.

Miracle Worker (2060): Drama; Anne Bancroft, Patti Duke.

The Night They Killed Rasputin (2061): Drama; Edmund Purdom, Yvette Lebon.

Burn Witch, Burn (2062): Melodrama; Janet Blair, Peter Wyngarde.

A Millionaire for Christy (2063):

Comedy; Fred MacMurray, Eleanor Parker (Re-issue).

Kid From Left Field (2064): Drama; Dan Dailey, Anne Bancroft (Re-issue).

As Young as You Feel (2065): Comedy; Monty Woolley, Constance Bennett (Re-issue).

A Blueprint for Murder (2066); Drama; Joseph Cotten, James Mason (Re-issue).

The Four Horsemen of the Apocalypse (2067) (C) (WS): Drama; Glenn Ford, Ingrid Thulin.

War Hunt (2068): Melodrama; John Saxon, Charles Aidman.

Make Mine a Double (2069): Comedy; Cecil Parker, Leo Franklyn.

Postman's Knock (2070): Comedy; Spike Milligan, Barbara Shelley.

Rio Grande (2071): Western; John Wayne, Maureen O'Hara (Re-issue).

Oh Susannah (2072): Western; Rod Cameron, Adrian Booth (Re-issue).

The Quiet Man (2073): Drama; John Wayne, Maureen O'Hara (Re-issue).

Mother Didn't Tell Me (2074): Drama; Dorothy McGuire, (Re-issue).

Geronimo (2075) (C) (WS): Melodrama; Chuck Connors, Pat Conway.

Panic in Year Zero (2076) (WS): Drama; Ray Milland, Joan Hagen.

Rider on a Dead Horse (2077): Western Drama; John Vivyan, Bruce Gordon.

The Interns (2078): Drama; Suzy Parker, Dick Adams.

Bloodhounds of Broadway (2079): Melodrama; Mitzi Gaynor, Scott Brady (Re-issue).

I'll Get By (2080): Musical; June Haver, William Lundigan (Re-issue).

The I Don't Care Girl (2081): Drama; Mitzi Gaynor, David Wayne (Re-issue).

Lisa (2082) (C) (WS): Melodrama; Stephen Boyd, Dolores Hart.

Cabinet of Caligari (2083) (WS): Drama; Glynis Johns, Dan O'Herlihy.

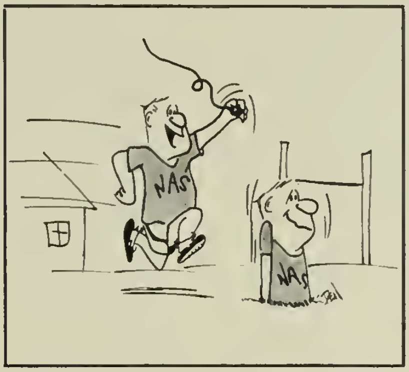
Operation Snatch (2084): Comedy; Terri Thomas, George Sanders.

Don't Knock the Twist (2085): Musical; Chubby Checker, Gene Chandler.

Television Programs

5268: TV-1 *Perry Mason*—Wintry Wife. TV-2 *The Dick Powell Show*—Who Killed Julie Greer.

All-Navy Cartoon Contest
LTJG Thomas K. Dean, USNR



"You did it, Sturdley. You just set a new base record for the standing broad jump!"

5269: TV-1 *Perry Mason*—Missing Melody. TV-2 *The Dick Powell Show*—Out of the Night.

5270: TV-1 *Perry Mason*—Irresolute Reformer. TV-2 *The Dick Powell Show*—Someone's Waiting.

5271: TV-1 *Perry Mason*—Fickle Fortune. TV-2 *The Dick Powell Show*—The Geeta's Box.

Voting Officer Has Pertinent Pointers for Absentee Voters

If, when election day rolls around, you wish to cast an absentee ballot for the candidate of your choice, here is a follow-up to the recent observance of Armed Forces Voters Day with a reminder of voting requirements in various states and sources of information on voting.

In order to vote, of course, you must be eligible under the laws of the state in which you claim residence. Each state is responsible for its own voting requirements and, therefore, has its own rules.

Since 1955, however, the trend for absentee voters with regard to qualifications has been toward uniformity.

In most states, the legal age for voting is 21. If you are registered in Georgia or Kentucky, you may vote when you are 18 years old. Alaska has fixed the minimum age at 19 while Hawaii bestows the voting privilege on its citizens at age 20.

If you satisfy the voting requirements in your state, you must register before you will be allowed to vote. Many states permit registration by absentee process and some will even register a qualified voter at the same time they accept a voted absentee ballot. In others, a voter must be registered before applying for a ballot. Your voting officer should be able to give you the requirements for your state.

Here are some pertinent points for would-be voters.

- If you are eligible to vote in your state, you should receive a Federal Post Card Application for Absentee Ballot (FPCA Standard Form 76, Rev. 1955) from your voting officer.

Personnel in the United States should have received their FPCA by 15 September. Overseas personnel usually receive theirs earlier.

- Your voting officer can give you the voting requirements for your state.
- Your ballot is secret. Nobody will attempt to influence your choice of a candidate. This is the law.
- The law requires your CO to make a statistical report on the number of personnel in his command of legal age to vote in general elections, the number who voted by absentee ballot and the number who voted at the polls.

These facts are included in a report to the President and the Congress. Collecting information for this report is, in no sense, an attempt to invade your voting privacy or determine for whom you cast your vote.

Voting officers who don't know all the answers to the questions you ask will find a list of helpful reference pamphlets and other useful information on the subject in BuPers Notice 1742 of 10 Jul 1962.

QUIZ AWEIGH ANSWERS

1. (d) Enforces civil law among the populace if no civilian police are immediately available.
2. (a) Only if you see a citizen committing an aggravated act which constitutes a breach of the peace or a felony, and you cannot contact the local police.
3. (b) Call a local policeman and then maintain order until he arrives.
4. (c) Any military personnel, whether they are commissioned or enlisted.

Quiz Aweigh is on page 43.

Plenty of Job Opportunities Found in Rating Structure

The Navy may have more job opportunities than you thought. On 1 Aug 1962, the Permanent Board for Review of the Enlisted Rating Structure compiled an up-to-date listing of Navy ratings. The total: 118. Of these, 64 are the General Ratings (GR) with which you are probably familiar. Forty-three are Service Ratings (SR), which are specialties within General Ratings, and 11 are Emergency Ratings (ER) which are used only during wartime (see box at bottom of next page.)

Here's a rundown:

RATING GROUP AND TITLE	TYPE OF RATING	PAY GRADE
GROUP I — DECK		
Boatswain's Mate (BM)	GR	E-4 thru E-9
Quartermaster (QM)	GR	E-4 thru E-9
Signalman (SM)	GR	E-4 thru E-9
Radarman (RD)	GR	E-4 thru E-9
Sonarman (SO)	GR	E-6 thru E-9
Sonarman G—Surface (SOG)	SR	E-4 and E-5
Sonarman S—Submarine (SOS)	SR	E-4 and E-5
Stevedore (ESB)	ER	E-4 thru E-9
Harbor Defense Sonarman (ESH)	ER	E-4 thru E-9
GROUP II — ORDNANCE		
Torpedoman's Mate (TM)	GR	E-4 thru E-9
Mineman (MN)	GR	E-4 thru E-9
Gunner's Mate (GM)	GR	E-8 and E-9
Gunner's Mate G—Guns (GMG)	SR	E-4 thru E-7
Gunner's Mate M—Missiles (GMM)	SR	E-4 thru E-7
Gunner's Mate T—Technician (GMT)	SR	E-4 thru E-7
Fire Control Technician (FT)	GR	E-7 thru E-9
Fire Control Technician G—Gun Fire Control (FTG)	SR	E-4 thru E-6
Fire Control Technician M—Missile Fire Control (FTM)	SR	E-4 thru E-6
Missile Technician (MT)	GR	E-4 thru E-9
GROUP III — ELECTRONICS		
Electronics Technician (ET)	GR	E-6 thru E-9
Electronics Technician N—Communications (ETN)	SR	E-4 and E-5
Electronics Technician R—Radar (ETR)	SR	E-4 and E-5
Data Systems Technician (DS)	GR	E-4 thru E-9
GROUP IV — PRECISION EQUIPMENT		
Instrumentman (IM)	GR	E-4 thru E-9
Opticalman (OM)	GR	E-4 thru E-9
GROUP V — ADMINISTRATIVE AND CLERICAL		
Radioman (RM)	GR	E-4 thru E-9
Communications Technician (CT)	GR	E-4 thru E-9
Yeoman (YN)	GR	E-4 thru E-9
Postal Clerk (PC)	GR	E-4 thru E-9
Personnelman (PN)	GR	E-4 thru E-9
Machine Accountant (MA)	GR	E-4 thru E-9
Storekeeper (SK)	GR	E-4 thru E-9
Disbursing Clerk (DK)	GR	E-4 thru E-9
Commissaryman (CS)	GR	E-4 thru E-9
Ship's Serviceman (SH)	GR	E-4 thru E-9
Journalist (JO)	GR	E-4 thru E-9
Physical Training Instructor (ESE)	ER	E-4 thru E-9
Instructor—Miscellaneous (ESI)	ER	E-4 thru E-9
Firefighter (ESF)	ER	E-4 thru E-9
Transportation Man (ESR)	ER	E-4 thru E-9
Chaplain's Assistant (ESC)	ER	E-4 thru E-9
Welfare and Recreation Leader (ESW)	ER	E-4 thru E-9
Booker—Motion Picture Service (ESU)	ER	E-4 thru E-9
Telecomm Censorship Technician (ESK)	ER	E-4 thru E-9
GROUP VI — MISCELLANEOUS		
Lithographer (LI)	GR	E-4 thru E-9
Illustrator Draftsman (DM)	GR	E-4 thru E-9
Musician (MU)	GR	E-4 thru E-9
GROUP VII — ENGINEERING AND HULL		
Machinist's Mate (MM)	GR	E-4 thru E-9
Engineman (EN)	GR	E-4 thru E-9
Machinery Repairman (MR)	GR	E-4 thru E-9
Boilerman (BT)	GR	E-4 thru E-9
Boilermaker (BR)	GR	E-6 thru E-9
Electrician's Mate (EM)	GR	E-4 thru E-9
Interior Communications Electrician (IC)	GR	E-4 thru E-9
Shipfitter (SF)	GR	E-6 thru E-9
Shipfitter M—Metalsmith (SFM)	SR	E-4 and E-5
Shipfitter P—Pipefitter (SFP)	SR	E-4 and E-5
Damage Controlman (DC)	GR	E-4 thru E-9
Patternmaker (PM)	GR	E-4 thru E-9
Molder (ML)	GR	E-4 thru E-9
Underwater Mechanic (ESM)	ER	E-4 thru E-9
GROUP VIII — CONSTRUCTION		
Engineering Aid (EA)	GR	E-6 thru E-9
Engineering Aid D—Draftsman (EAD)	SR	E-4 and E-5
Engineering Aid S—Surveyor (EAS)	SR	E-4 and E-5
Construction Electrician (CE)	GR	E-6 thru E-9
Construction Electrician W—Wiring (CEW)	SR	E-4 and E-5
Construction Electrician P—Power (CEP)	SR	E-4 and E-5
Construction Electrician T—Telephone (CET)	SR	E-4 and E-5
Construction Electrician S—Shop (CES)	SR	E-4 and E-5
Equipment Operator (EO)	GR	E-6 thru E-9
Equipment Operator H—Hauling (EOH)	SR	E-4 and E-5
Equipment Operator N—Construction Equipment (EON)	SR	E-4 and E-5
Construction Mechanic (CM)	GR	E-6 thru E-9
Construction Mechanic A—Automotive (CMA)	SR	E-4 and E-5
Construction Mechanic H—Construction (CMH)	SR	E-4 and E-5
Builder (BU)	GR	E-6 thru E-9
Builder L—Light (BUL)	SR	E-4 and E-5
Builder H—Heavy (BUH)	SR	E-4 and E-5
Builder R—Concrete (BUR)	SR	E-4 and E-5
Steelworker (SW)	GR	E-6 thru E-9
Steelworker E—Erector (SWE)	SR	E-4 and E-5
Steelworker F—Fabricator (SWF)	SR	E-4 and E-5
Utilities Man (UT)	GR	E-6 thru E-9
Utilities Man P—Plumber (UTP)	SR	E-4 and E-5
Utilities Man B—Boilerman (UTB)	SR	E-4 and E-5
Utilities Man A—Air Conditioning (UTA)	SR	E-4 and E-5
Utilities Man W—Water and Sanitation (UTW)	SR	E-4 and E-5
GROUP IX — AVIATION		
Aviation Machinist's Mate (AD)	GR	E-8 and E-9
Aviation Machinist's Mate R—Reciprocating Engine Mechanic (ADR)	SR	E-4 thru E-7
Aviation Machinist's Mate J—Jet Engine Mechanic (ADJ)	SR	E-4 thru E-7
Aviation Electronics Technician (AT)	GR	E-5 thru E-9
Aviation Electronics Technician N—Radio and Radio Navigation Equipment (ATN)	SR	E-4 only

RATING GROUP AND TITLE	TYPE OF RATING	PAY GRADE
Aviation Electronics Technician R—Radar and Radar Navigation Equipment (ATR)	SR	E-4 only
Aviation Electronics Technician W—Airborne CIC Operator (ATW)	SR	E-4 only
Aviation Ordnanceman (AO)	GR	E-4 thru E-9
Air Controlman (AC)	GR	E-4 thru E-9
Aviation Electrician's Mate (AE)	GR	E-4 thru E-9
Parachute Rigger (PR)	GR	E-4 thru E-9
Aerographer's Mate (AG)	GR	E-4 thru E-9
Tradevman (TD)	GR	E-4 thru E-9
Aviation Boatswain's Mate (AB)	GR	E-8 and E-9
Aviation Boatswain's Mate E—Launching and Recovery Equipment (ABE)	SR	E-4 thru E-7
Aviation Boatswain's Mate F—Fuels (ABF)	SR	E-4 thru E-7
Aviation Boatswain's Mate H—Aircraft Handling (ABH)	SR	E-4 thru E-7
Aviation Fire Control Technician (AQ)	GR	E-5 thru E-9
Aviation Fire Control Technician B—Bomb Director (AQB)	SR	E-4 only
Aviation Fire Control Technician F—Fire Control (AQF)	SR	E-4 only
Aviation Structural Mechanic (AM)	GR	E-8 and E-9
Aviation Structural Mechanic S—Structures (AMS)	SR	E-4 thru E-7
Aviation Structural Mechanic H—Hydraulics (AMH)	SR	E-4 thru E-7
Aviation Structural Mechanic E—Safety Equipment (AME)	SR	E-4 thru E-7
Aviation Storekeeper (AK)	GR	E-4 thru E-9
Photographer's Mate (PH)	GR	E-4 thru E-9
Photographic Intelligenceman (PT)	GR	E-4 thru E-9
Aviation Antisubmarine Warfare Technician (AX)	GR	E-4 thru E-9
GROUP X — *MEDICAL*		
Hospital Corpsman (HM)	GR	E-4 thru E-9
GROUP XI — *DENTAL*		
Dental Technician (DT)	GR	E-4 thru E-9
GROUP XII — *STEWARD*		
Steward (SD)	GR	E-4 thru E-9

Radiological Defense Lab Recommends Safety Measures In Nuclear Blasts at Sea

The U.S. Naval Radiological Defense Laboratory (NRDL) at San Francisco, Calif., has made a series of studies to provide for radiological countermeasures and ship design modifications to prepare adequately for the possibility of nuclear attacks against the Navy.

The laboratory has also published some recommendations of particular interest to Navymen for minimizing personal injury from airblast, underwater shock and thermal radiation effects of nuclear detonations.

Here are NRDL's recommendations for personnel action.

In an airblast, topside personnel are in danger of being picked up and thrown around when the force of the blast reaches them. Below decks, personnel not only have this hazard but are also in greater danger of being hit by loose gear being hurled around.

If you are topside when an air blast occurs, close your eyes when you see the flash or see the sky light up. You should also cover your face with your hands.

Drop to the deck as quickly as possible and curl up. If you are in a gun mount or other crowded location where you can't curl up, crouch and bend your head down.

Two to five seconds after the flash, or after the heat sensation is over, take your hands away from your face and grab any solid structure you can get your hands on to prevent being blown overboard or into the ship's structure by the blast winds.

A person may be blind for about 30 minutes after the blast but the chances of the eyes being seriously burned are small.

Everyone topside should study the physical setup of his GQ station and locate, in advance, the place which offers the maximum cover from thermal radiation.

Personnel both topside and below decks are in danger of becoming missiles when there is an underwater blast. Shock force travels through the ship's structure and produces a rapid upward acceleration of the deck.

A man may only be thrown off balance. More likely, he will be hurled into a bulkhead or into the overhead if he doesn't take preventive measures.

The best way of avoiding injury from an underwater blast is to hang onto something solid, flex your knees and rest on the balls of your feet. Do not lie on the deck.

This Will Help Explain the How and Why of Navy Ratings

Why so many ratings in the enlisted structure? One reason—and a good one—is that the Navy needs a rating system which provides men who can handle many different job specialties during both wartime and peacetime. The increasing complexity of weapons and equipment and the large number of Reservists and one-hitch men on active duty are additional reasons.

The three classifications that make up the structure assure the Navy that ratings are available when needed.

- GR – General Ratings are for men qualified in all aspects of a general occupational field.
- SR – Service Ratings are segments of General Ratings which reflect qualification in a more limited area of an occupational field. Service Ratings provide specialists when they are needed. (Navy requirements during both wartime and peacetime dictate which General Ratings, and which pay grades, are further specialized into Service Ratings.)
- ER – Emergency Ratings are for men qualified in civilian skills which are normally needed only during wartime.

The *Manual of Qualifications for Advancement in Rating* (NavPers 18068–Revised) explains the rating structure in detail and describes all ratings and apprenticeships.

Navy Wives Can Help Budget and Small Fry As An Overseas Teacher

One of the first questions that occurs to many Navy parents when they get orders to an overseas shore station is: What kind of schools are available for the children?

This is rarely a problem, especially at shore stations where large numbers of dependents are concentrated. The Navy, for instance, operates 26 schools serving about 9100 dependents.

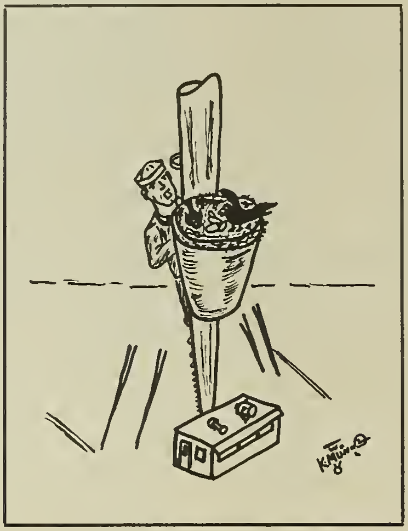
Bear in mind that these are the Navy operated schools only. When Navymen are located at an overseas station which is primarily under the control of the Army or Air Force, there are schools operated by those services.

To have a good school, there must be good teachers. The Navy has been fortunate, by and large, in obtaining well-trained and experienced teachers and administrators to staff its schools.

A large part of its success has been due to Navy wives who have been able and willing to teach in the schools while they were living on board the stations at which the schools were located.

There are definite advantages for Navy families in which the wife is a teacher. For instance, if your wife agrees to teach school upon arrival at an overseas station, there is a possibility that you and your wife will get concurrent travel—an advantage not extended to everybody.

All-Navy Cartoon Contest
William K. Munn, ENCS(SS), USN



"It really is!"

There is also, of course, the extra income in the family to help you combat that chronic disease of most overseas families: going broke saving money.

If your wife has a bachelor's degree, her starting salary would be $4435 per year. Teachers with a master's degree enter at $4635. If the teacher has completed at least 30 semester hours of work beyond the master's degree, the beginning salary is $4735. Administrative personnel are paid on a yearly basis and are usually started at the GS-9 level ($6435 per annum).

SCHOOL AND LOCATION	Elementary Grades	High School Grades
Argentia, Newfoundland (Arthur L. Bristol School)	1-8	9-12
Guantanamo Bay, Cuba (William T. Sampson School)	1-8	9-12
Keflavik, Iceland (Alfred Thayer Mahan School)		
Iwakuni, Japan (Matthew C. Perry School)	1-8	9-12
Midway Island (George Cannon School)	1-8	9-12
Naples, Italy (Forrest Sherman School)	1-8	9-12
Port Lyautey, Morocco (Thomas Mack Wilhoite School)	1-8	9-12
Rota, Spain (David Glasgow Farragut School)	1-8	9-12
Sangley Point, Philippines (John Paul Jones School)	1-8	9-10
San Miguel, Philippines (Oliver Hazard Perry School)	1-8	None
Sasebo, Japan (Ernest J. King School)	1-8	9-12
Sidi Yahia, Morocco (Stanford C. Hooper School)	1-3	None
Sigonella, Sicily (Stephen Decatur School)	1-8	9-12
Subic Bay, Philippines (George Dewey School)	1-8	9-12
Tainan, Republic of China (Jonathan M. Wainwright School)	1-8	9-12
Ping Tung, Republic of China (Claire Lee Chenault School)	1-8	
Tsoying, Republic of China (Stephen C. Luce School)	1-8	
Trinidad, the West Indies (Theodore G. Ellyson School)	1-8	
	Correspondence	Courses
Yokohama, Japan (Richard E. Byrd School)	1-8	None
Yokohama, Japan (Nile C. Kinnick, Jr., School)	1-8	9-12
Yokosuka, Japan (Daniel J. Callaghan School)	1-8	None
Yokosuka, Japan (The Sullivans School)	1-8	None

Teachers are civil service employees but their appointments are in the "excepted" category and, as such, their service cannot be applied toward attaining civil service career status.

The civilian teaching experience of the Navy Department school teacher averages eight years. However, if your wife meets the required qualifications, namely, has a bachelor's degree, two years of successful teaching and 18 semester hours' credit in professional education courses, her chances are good for favorable consideration for a teaching job at your overseas post provided, of course, there are jobs open there.

Listed below are the places at which Navy schools are located and the grades which they include.

The list of schools on this page is not intended to show the amount of instruction given at various posts at which the Navy has schools but, rather, to show what grades your wife could teach if she is interested in the job and the Navy is interested in having her as a teacher.

Your wife can get specific information about Navy-operated dependent schools and their teaching requirements by writing the Chief of Naval Personnel (Pers C17).

If you are coming up for an overseas tour and your wife has all the information she needs, she should obtain a Civil Service Form 57 from a post office or from the civilian personnel office at any government operation near you; fill it out including a resume of college credits and send it with your request for foreign shore duty.

Navy Jobs Are Available For Navy Wives, Daughters

Navy wives and daughters have always been interested in activities of the Navy, and the Navy has reciprocated this interest. Some Navy wives are associated with the service in volunteer work and many Navy wives with office experience or qualification are employed at naval installations on or near the duty stations of their husbands. This kind of working arrangement is mutually beneficial to them and to the government.

At the present time there are jobs open, particularly in larger cities where there are numerous Navy activities. For example, chances are that vacancies may exist in your local Navy command for typists or stenographers. If the family situation permits, there's no good reason why your wife or, for that matter, any of her friends, shouldn't apply for a job under Civil Service.

The pay is good. Typists receive at least $3500; stenographers' pay varies from $3760 to $4040 or more, depending on the job. An automatic $105 within-grade salary increase is given for each year of satisfactory work and, for those who qualify, there are many opportunities for advancement. There's no reason why a reasonably bright girl—and your wife is certainly that, otherwise she wouldn't have married you—shouldn't advance to secretary or administrative assistant within a surprisingly short time. As you know, it is the Navy's policy to promote from within the organization.

In addition, she will be eligible for 13 workdays of vacation leave, eight workdays of paid holidays and 13 workdays of sick leave each year.

Applicants for typist positions must meet Civil Service Commission minimum age requirements; pass a written examination consisting of a general abilities test and a typing test at 40 words per minute. Applicants for stenographic positions must also pass a stenography test at 80 words per minute.

How to go about it? It's suggested that applicants inquire at the civilian personnel office at the nearest naval installation. You'll get the necessary information there. If you are coming to Washington and want advance information regarding positions in the Navy headquarters offices, write to DCPD-AO, Washington 25, D. C.

New Manual Explains Naval Officer Classification System

A new manual has been published by the Bureau of Naval Personnel entitled *The Naval Officer Classification System* (NavPers 18591).

It provides officer candidates, newly commissioned and Reserve officers with a general introduction to the Navy's officer classification system with emphasis on its importance to the individual and to the Navy.

The booklet is divided into three parts. The first gives a general explanation of the classification system. Part Two explains the classifications which pertain to billet requirements and Part Three explains the classifications pertaining to officer qualifications.

The manual can be obtained upon request from the Naval Supply Center at Oakland, Calif., or in the East, Norfolk, Va.

Correspondence Courses Listed for Enlisted Men

Six new enlisted correspondence courses have been issued by the Bureau of Naval Personnel, and six enlisted courses have been discontinued.

Enlisted correspondence courses for active duty Navymen will be administered, in most cases, by your local command. Your division officer will help you select the courses best suited to your rate and training program.

New Courses

Aviation Fire Control Technician 3 (NavPers 91633-1)

Electronics Technician 2, Vol I (NavPers 91374-2)

Electronics Technician 2, Vol II (NavPers 91375-1)

Journalist 1 & C (NavPers 91453)

Missile Technician 1 & C (NavPers 91361)

Shipfitter 3 & 2 (NavPers 91535-1)

Discontinued Courses

Aviation Fire Control Technician 3 (NavPers 91633)

Electronics Technician 2, Vol I (NavPers 91374-1B)

Electronics Technician 2, Vol II (NavPers 91375-C)

Shipfitter (M) 3 (NavPers 91533-1B)

Shipfitter (M) 2 (NavPers 91534-1B)

Shipfitter (P) 3 & 2 (NavPers 91539-1)

NOW HERE'S THIS

Space Missile Photographers

Almost everyone these days has watched a rocket blast off and soar into the wild blue yonder on a TV newscast. Frequently the rocket is followed by a camera's eye well beyond a distance ordinarily thought to be reasonable.

Some of the pictures are taken from the air.

Such a caper is no mean trick as the boys in Heavy Photographic Squadron 62 at Jacksonville will tell you.

They should know for they have been providing photographic coverage for the National Aeronautics and Space Administration (NASA) Project *Mercury* and Saturn Vehicle development. They were snapping pictures as Lieutenant Colonel John Glenn, USMC, was launched into orbit last February.

As the giant rockets are ignited, the Navy pilots maneuver their *Skywarrior* aircraft and adjust their flight path so as to pass very close to the vehicle as it streaks spaceward.

The pilot is like the matador at a bullfight—all that's missing is someone to yell *olé*.

Timing is extremely important because the photo jets must begin their approach toward the launch area from positions as far as 75 miles away.

As the rocket begins its climb toward outer space, the *Skywarrior* crew members push the buttons and the cameras begin to snap and grind. On a typical test, as many as seven aerial cameras are working away.

As the rocket streaks past, the pilot jockeys his plane so as to get the longest possible series of pictures and then heads home where ground crews and photographer's mates are waiting to unload the cameras and process the films.

That's how you and NASA know what's going on upstairs. Get the picture?

Duty in Barbados Can Be Charming If You Go Well Prepared

BARBADOS is the easternmost of the West Indian Islands and is approximately 600 miles southeast of Puerto Rico and 175 miles northeast of Trinidad. There is a U. S. Naval Facility located there.

The island is 21 miles long and 14 miles wide at its broadest point. It is shaped very much like a pork chop (center cut), with the small end at the north. Not very many Navy families will find their way to this location. However, it can be considered as representative of island duty in a tropical or near tropical area. You should find it interesting.

Barbados is one of the most densely populated spots in the world. With an area of only 166 square miles it contains over 250,000 people. The majority of the population are of African origin.

Bridgetown, the capital and only city, is a seaport where the harbor police still wear uniforms like those of Nelson's sailors.

The climate is pleasant and varies little year round. The gentle trade winds blow year round at almost a constant speed, and the temperature seldom goes beyond the 75 to 85 limit. September and October are the hottest months, and November can generally be counted on to be the wettest month of the year. Barbados is in the breeding grounds of hurricanes, but rarely feels the effects of one.

Lightweight summer clothing, completely informal, is acceptable for men and women throughout the year. The British influence is prevalent, however, in that most clubs and hotels require coat and tie at evening meals and at after-dark functions.

The naval facility is located in the Parish of St. Lucy on the extreme northern end of the island. It is quite removed from all residential areas.

Entry Requirements — No passports are required of U. S. citizens who are staying on the island for less than six months. Proof of citizenship is all that is required. For U. S. military personnel and their dependents, identification cards and standard transfer orders or leave papers are all that are necessary.

Entry arrangements for military dependents must be made before their arrival. Entry approval must be granted by Commandant, 10th Naval District.

Authorization for concurrent travel, if requested, will also be granted by the Commandant, when certification of availability of suitable housing accommodations is made by the naval facility. It is not usually necessary for the facility to make definite arrangements before your arrival. During the tourist season, however, from December to April, there is an acute shortage of suitable housing accommodations, and it may become necessary to make specific agreements with a landlord. When such is the case, the arrangements made locally will be binding on you.

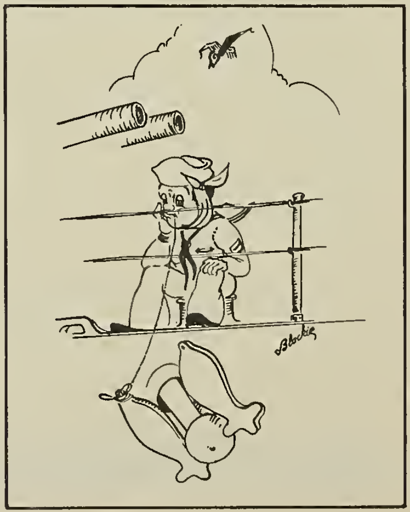
Once housing is certified available, entry approval together with concurrent travel authorization will be granted.

Dependents must furnish evidence of having had immunization shots for smallpox, typhoid and tetanus. Although yellow fever immunization is not required, it is recommended that it be obtained before entry.

Customs — Personal effects are admitted duty-free, including household effects and automobiles. There is no export duty. Normal customs duties are 12 per cent of invoiced value on goods from British countries and 24 per cent on non-British.

Currency — British West Indies dollars, commonly called BWI (Bee Wee) dollars, are the currency of the island. Notes are in denominations of one, two, five, 10, 20, 50 and 100 dollars. The coins used are WI bronze two-cent pieces and silver five, 10, 25 and 50 cent pieces. Approximate rates of exchange are $1.00 U. S. to $1.60 BWI or $1.00 BWI to 59 cents U. S. (These rates are for guidance only and may change.)

All-Navy Cartoon Contest
Emmet J. Geisler, YN1, USN



In Barbados, as in other overseas areas, Navymen and their dependents are being urged to restrict their spending to help reduce the flow of gold out of the United States. One way, for example, is to shop in the exchange, rather than the open market. Another, even better way, to help the nation's finances—and your own—is to increase the amount you save through a Freedom Bond allotment or an allotment to a Stateside savings account.

Language — English is the formal spoken language. The local people, however, speak with a distinct Bajan accent which is unique and charming. It is at times rather difficult, but not impossible, to understand.

Public Transportation — There is an island-wide bus service which is substandard in comparison to stateside transportation. There are few buses of modern design on the island which are acceptable. The buses cannot be relied upon for transportation, as there is very limited service that covers the area of the naval facility.

There are no railroads on the island.

Cars, with or without chauffeurs, can be hired. Drive-yourself cars are obtainable for between $42.50 and $62.50 BWI per week. Gasoline costs 65 cents BWI per American gallon. Chauffeurs' wages range between $12.00 and $15.00 BWI weekly.

There is an island-wide taxi service, but its cost prohibits use as general transportation. A one-way trip from the facility to Bridgetown (18 miles) costs $8.00 BWI.

There is no satisfactory public transportation to and from the usual residential areas and the facility.

Private Automobiles — A private car is almost a necessity on the island. This is due to the remoteness of the facility and the lack of suitable public transportation. American automobiles are allowed on the island. British and German automobiles are available locally and are very popular but expensive.

Used automobiles are rather expensive because the duty has already been paid by the previous owner and is considered part of the cost of the car. However, you may be able to arrange transportation in this manner.

Housing – There are no government quarters available for dependents at this time.

The quality of local housing is generally below U. S. Standards. Furnished housing is available, but you will find that electrical appliances are a welcome adjunct to living American fashion. Electricity is all 50-cycle AC current. This does not affect anything except electric timers and other appliances which run on synchronous electric motors. Phonographs can be altered and heating elements are not affected appreciably. Electric stoves, however, cause an expensive rise in the monthly electric bill. Propane gas is available and gas stoves are installed in most of the suitable houses.

There is no television.

Household Effects – Shipment of household effects can be arranged after area entry approval has been received. Experience has shown it generally takes two to three months to receive household effects or automobiles shipped from a stateside duty station.

Medical and Dental Facilities– There is no medical officer attached to the command. A sick bay is operated by a hospital corpsman, first class, to take care of the routine health and sanitation needs of the command. The local medical doctors and dentists have been employed to some extent and there are adequate facilities available for routine medical needs.

Schools–The local public schools are overcrowded and not up to the standards of stateside public schools. There are several private schools which allow a limited number of children to attend on a "first come–first served" space available basis. These schools are located on the other end of the island from the facility. A Navy school bus is operated for Navy dependent children.

Some families with children employ the Calvert Correspondence Courses (grades 1-8) and the University of California Extension Division Correspondence Courses (grades 9-12). Tutors can be hired for a nominal fee for the administration of these courses. Regardless of the method used, the cost is borne by the Navy.

All-Navy Cartoon Contest
LTJG Thomas K. Dean, USNR

". . . and you must be ol' marblehead."

Churches – There are Anglican churches in every parish, three Catholic churches and several Methodist churches, plus other denominations. Protestant services are conducted on the facility each Sunday by an American minister residing on the island. A Navy vehicle transports Catholic personnel to a nearby church each Sunday morning.

Food–There is a Navy Exchange commissary and retail store at the facility. The commissary receives shipments of fresh food every three weeks, including frozen pasteurized milk. Locally, foodstuffs are plentiful though expensive. Fresh vegetables will be brought to your door daily by local vendors.

Some of this produce will be unfamiliar, but is excellent when prepared the island way. The local markets also carry many U. S. brand foods.

Clothing – Lightweight summer clothing is recommended. Evening dress is optional for short-stay visitors, a must for winter residents who want to participate in social life.

Between January and April light summer clothing may be worn by ladies. The temperature never drops below 68 degrees F. in these winter months and seldom exceeds 88 degrees in the summer.

Wash-and-wear clothing is highly recommended. The dry cleaning service on the island is satisfactory, but slow in comparison to stateside standards. Officer uniforms for work are tropical khaki or working white long, which is also acceptable during the evening in most instances. Service dress whites or dinner dress whites are worn to formal affairs. The dungaree uniform with blue cap is worn at work by enlisted men. For liberty, undress white uniform with neckerchief is worn. Civilian attire, appropriately worn, is optional.

Shopping – The Navy Exchange carries most articles required for daily living and takes special orders for items which are not in stock. The delay in receiving special orders is usually only two to four weeks. Local shopping is a real chore for a housewife on the island. Almost all of the shops and stores are located in Bridgetown. There are two well-stocked supermarkets, one in Speightstown, the other on the main street of Bridgetown. In addition to several department stores in Bridgetown, there are also several shops along the southwest coast. All in all, shopping is a matter of experience. There is virtually no item which cannot be found. It is just a matter of knowing where to go to find it.

Communication Facilities – There is an island-wide telephone service which is comparable to stateside service. The Barbados Telephone Company Ltd., has daily schedules for telephone calls to the States and elsewhere. There is also a cable and wireless office to handle telegrams. Incoming telegrams can be sent through Navy Radio Washington (NSS).

The postal address is: U. S. Naval Facility, Navy #505, c/o Fleet Post Office, New York, New York.

First class and air mail arrives from and departs to Fleet Post Office, New York. Parcel post arrives and departs at least once every three weeks.

Recreation–The pleasures of the island are similar to those of all such British outposts. Tennis is a great sport and is played by young and old alike. There is a nine-hole golf course in Hastings and one nearer the facility in the Parish of St. James. The sea is always pleasant for sunbathing and swimming. There is no surf fishing, but boats can be hired to go out by the day or week.

Snorkeling and skin-diving are excellent sports for the island. Cricket matches, water polo and tennis matches are about the only spectator sports.

In the evening, dancing is the national pastime. There are many night spots where excellent calypso music is played.

There is also a five-hole golf course on the facility, in addition to two archery ranges, a skeet range, a smallbore rifle and pistol range, a softball field and basketball, tennis, volleyball and shuffleboard courts.

The special services department also operates a hobby shop which includes complete ceramics facilities, leathercraft and a darkroom for photography enthusiasts. Personnel of ship's company have formed a thriving SCUBA Diving Club and are always eager to gain new members.

Equipment for all of the above activities is supplied by special services.

Pets—Barbados has no quarantine facilities at present. Dogs and cats can only be brought from the United Kingdom and certain British West Indian territories after permission has been obtained from the Director of Agriculture. Caged birds can be brought in from most countries. There are neither wild animals nor snakes. In the woods on the northern part of the island, monkeys may be seen now and then.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current AlNavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many Instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes.

AlNavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

AlNavs

No. 17—Revised the official tables of distances, and clarified the definition of "official distance," as used in *Joint Travel Regulations.*

No. 18—Discussed revision of per diem allowances for temporary duty of midshipmen.

All-Navy Cartoon Contest
Larry D. Prier, AN, USN

"Jones!" . . . "Here!"

Instructions

No. 1133.13B—Provides information on career incentives to induce selected high quality personnel to make the Navy a career, and describes procedures for doing so through the STAR program.

No. 1440.27A—Discusses details of the revised Selective Conversion and Retention (SCORE) program.

No. 1630.3—Directs attention to the need to correct improper procedures in connection with expense claims for temporary shore patrol assignments, and to the need for taking appropriate action when such abuses have been committed.

No. 1130.4G—Provides instructions for enlistment in the Regular Navy or release to inactive duty of certain Naval Reserve personnel serving on active duty.

No. 1440.27A—Combines certain features of the STAR program and the rating adjustment program into a single rating conversion program which will be called the Selective Conversion and Retention (SCORE) program.

No. 1520.83A—Provides for reports from officers when, through voluntary off-duty study, a change occurs in either educational level or degrees earned, or in foreign language proficiency.

No. 1571.16B—Insures that all members of the Navy, Naval Reserve, applicants for enlistment and inductees are provided information and guidance with respect to their reemployment rights upon return to civilian life.

Notices

No. 1440 (29 June)—Announced changes in the Navy enlisted rating structure which established the Aviation Antisubmarine Warfare Technician (AX) rating and outlined procedures for a change in general and service ratings of active and inactive duty personnel to conform to the revised rating structure.

No. 5802 (22 June)—Provided information concerning the naturalization of aliens and the right to immediate naturalization of alien wives and alien adopted children of citizen members assigned to duty abroad.

No. 1650 (25 June)—Announced the establishment of a Naval Reserve Meritorious Service Ribbon.

No. 1430 (26 June)—Provided information regarding advancements resulting from the February 1962 Navy-wide examinations.

No. 1742 (10 July)—Provided information concerning the Navy's absentee voting assistance program and directed attention to the citizenship and voting responsibilities of naval personnel in the 1962 elections.

No. 1650 (24 July)—Announced award of the Navy Unit Commendation to Task Group 43.2, and furnished instructions concerning the method of distribution to eligible personnel.

No. 1520 (25 July)—Announced the selection of officers for the submarine class which convened 24 September at the Submarine School, New London, Conn.

No. 1221 (31 July)—Alerted all commands to the August distribution of the revised *Manual of Navy Enlisted Classifications* (NavPers 15105C) and called attention to changes contained.

No. 1020 (7 August)—Implemented recently approved changes to U. S. Navy uniform regulations.

No. 1300 (7 August)—Announced revised procedures for reporting the number and location of Navy military dependents residing outside the continental United States.

DECORATIONS & CITATIONS

LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ COOPER, Clifford S., RADM, USN, for services from May 1960 to June 1962 as Commander Fleet Air Mediterranean and Commander Naval Activities Mediterranean. During this period, RADM Cooper exhibited marked professional skill, dynamic leadership, diplomatic ability, and untiring devotion to duty in carrying out his responsibilities. As the Fleet Air Commander under the Commander in Chief, U. S. Naval Forces, Europe, he translated policy guidance into the military direction of the air forces under his command, bringing them to an exceptionally high state of combat readiness. As the overall Naval Shore Activity Commander in the Mediterranean area, he skillfully directed the activities under his command, resulting in a great capability to render effective support to the Sixth Fleet and his own air forces. A senior naval commander in the Mediterranean area, he contributed greatly to strengthening the relationships and ties of friendship between the United States and the littoral Mediterranean nations.

★ GIRAULT, Norton R., CDR, USN, for service from July 1959 to March 1962 as Project Mercury Officer on the Staff of Commander Destroyer Flotilla Four. During this period, CDR Girault made important and significant contributions to the planning and conduct of the 20 successful recovery operations in the National Aeronautics and Space Administration's *Little Joe, Redstone,* and *Atlas* flights which culminated in the suborbital flights and three-orbit mission of America's astronauts. CDR Girault served outstandingly as Senior Watch Officer in the Project Mercury Recovery Room at Cape Canaveral. By his exceptional organizational ability, diplomacy and inspiring devotion to duty, he contributed significantly to the success of the Navy's recovery role in the man-in-space program of the United States.

★ GRIDER, John M., CAPT, USN, for service from 14 Aug 1960 to 18 May 1962 while serving as Chief Signal Officer on the Staff of Commander in Chief, Allied Forces Southern Europe. Exercising a high degree of professional skill and resourcefulness, CAPT Grider effectively provided responsive communications in support of Allied Forces Southern Region. During this period, significant progress was realized to insure adequate communications for the transition from peacetime to wartime status, and to support the combat forces designated for control by Commander in Chief, Allied Forces Southern Europe. Through his personal leadership, diligence, and professional competence, the planned military projects vital to the Southern Europe Area were accelerated or completed. Under his guidance, the improvements realized during the past two years for providing timely and responsive NATO communications to the designated forces of Commander Sixth Fleet were singularly outstanding.

★ LEISER, Harry W., CAPT, SC, USN, for service from April 1957 to May 1962 while serving with the Military Traffic Management Agency (MTMA) and the Defense Traffic Management Service (DTMS). As Regional Director, Western Traffic Region, from 1 Apr 1957 to 31 Mar 1961, CAPT Leiser directed the traffic management activities and operations of the Department of Defense in the procurement and use of commercial transportation by shipping and receiving installations in the eight western states. In formulating procedures and overcoming numerous complex problems, he contributed greatly to the success of his organization. While serving as Director of Freight Traffic, Headquarters, Defense Traffic Management Service, he supervised activities involving the control of expenditures by the Military Services in excess of half a billion dollars per year. He established new and improved procedures for household goods traffic and established a new decentralized export traffic control system. In addition, he devised, tested, and implemented the major operating concept now employed in military traffic management operations nationally, which is entitled "Traffic Management by Anticipation,"

★ PHILLIPS, Richard H., RADM, USN, for service as Deputy Commandant, National War College, from October 1959 to June 1962. Charged with the responsibility of continuous development and administration of an effective academic program in high-level military and international policy, RADM Phillips has rendered distinctive service in discharging an important and difficult assignment. Possessing a keen knowledge of international politics and global strategy, he recognized and took action on the necessity of frequently reappraising and revising the various courses of study. As Deputy Commandant of one of the government's highest educational institutions, he has made a lasting impression on the War College, enhanced its reputation, and has contributed significantly to the mutual understanding and coordination of effort among the military services and civilian agencies of the government.

NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ EASTWOOD, Timothy M., BM3, USN, for heroic conduct on the afternoon of 10 Feb 1962 while serving on board USS *Proteus* (AS 19) at Holy Loch, Scotland. While in charge of a five-man mooring party, Eastwood, upon observing that two of his men had fallen into the water, immediately instituted rescue proceedings in the face of 35- to 40-knot winds. Upon observing that the men could not pull themselves up the line which was thrown to them, he lowered himself into the frigid waters and succeeded in grasping one of the victims by the coat collar and the other with a leg scissors around the waist. Although his hands were getting numb, Eastwood managed to hold the two men in this position for approximately 15 minutes until all were lifted to safety by a rescue craft.

★ KEANEY, Kevin J., LCDR, CHC, USN, for heroic conduct on 27 Nov 1961 while serving with the 12th Marine Regiment, Third Marine Division (Reinforced), Fleet Marine Force, Pacific. Upon learning that a serviceman had threatened to shoot two persons with a .45 caliber pistol, and had resisted arrest by taking refuge in a private dwelling, LCDR Keaney entered the building and, after a lengthy conversation with the armed and obviously distraught fugitive, succeeded in obtaining the loaded pistol and in turning the man over to the Armed Services Police.

BOOKS

LOTS OF BANG-BANG OFFERED THIS MONTH

TWO INTERESTING combinations of aviation stories have been included among the selections for review this month. **Fighter Pilot,** edited by Stanley Ulanov, gives the general view; **Greatest Fighter Missions,** by Edward H. Sims, has a narrower range but goes into greater details.

Fighter Pilot is a collection of some 60 excerpts of stories told by the men themselves—pilots of every nationality, from the volunteers in the Lafayette Escadrille to the RFC and the RCAF, to German, Japanese and Russian. And of course, there are Chennault, Boyington and Lindbergh. The items are based upon letters, diaries and various reports, covering almost 50 years, from World War I, the Spanish Civil War and World War II to Korea and the Arab-Israeli war. Very comprehensive and full of chattering guns and smoke-streaked skies.

Greatest Fighter Missions is, as we say, of much more limited range. It covers the stories of 11 Navy and Marine aces who, during the war with Japan, made a total of 235 kills, and who lived to tell their stories. The heroes who include such names as Richard Bong, Joe Foss, David McCampbell, are well known to aviation and military fans. However, the strength of this book is in its presentation. Rarely has the brutal, machine-gun rattling atmosphere in which they flew been so well recreated. Sims tells of the deadly *Zeros* over Midway and Guadalcanal, the old P-40s, then the P-51s and *Corsairs*. He describes in vivid detail Rabaul, Leyte Gulf, the carrier war, the dogfights over Pacific islands. He also includes the fierce mass engagements such as the Turkey Shoot in 1944 in which 366 Japanese planes were downed in one day. This is a companion piece to Sims' *American Aces*.

Considering the tenor of the preceding title, **The End of the Imperial Japanese Navy,** by Ito Masaonori, seems most appropriate for our next choice. This book is not only a story of naval battles, it is also quite readable as an analysis of the minds and motives of individual Japanese commanders as they lost their confidence in struggling against U. S. strength and technical ability. Ito also brings out the point that Admiral Kurita's failure to penetrate Leyte Gulf was in defiance of orders, and gives, in Kurita's own words, the reasons why he turned away when victory was in his hands.

We also have another pair of titles which make a logical combination—**Arctic Odyssey,** the life of RADM Donald B. McMillan, by Everett S. Allen, and **The Poles,** by Willy Ley and the editors of *Life*. In *Odyssey*, you will meet one of the United States' foremost seafaring men and explorers. After working his way through Bowdoin College and a brief stint of teaching, he became one of Peary's chief assistants on the arctic expedition that finally reached the North Pole. He is now the only survivor of that expedition. For almost 50 years, he continued to travel in the Arctic. The story of the schooner *Bowdoin*, which for many years visited the North with a crew of scientists and amateurs is told in detail, as well as the researches and friendships developed with the Eskimos.

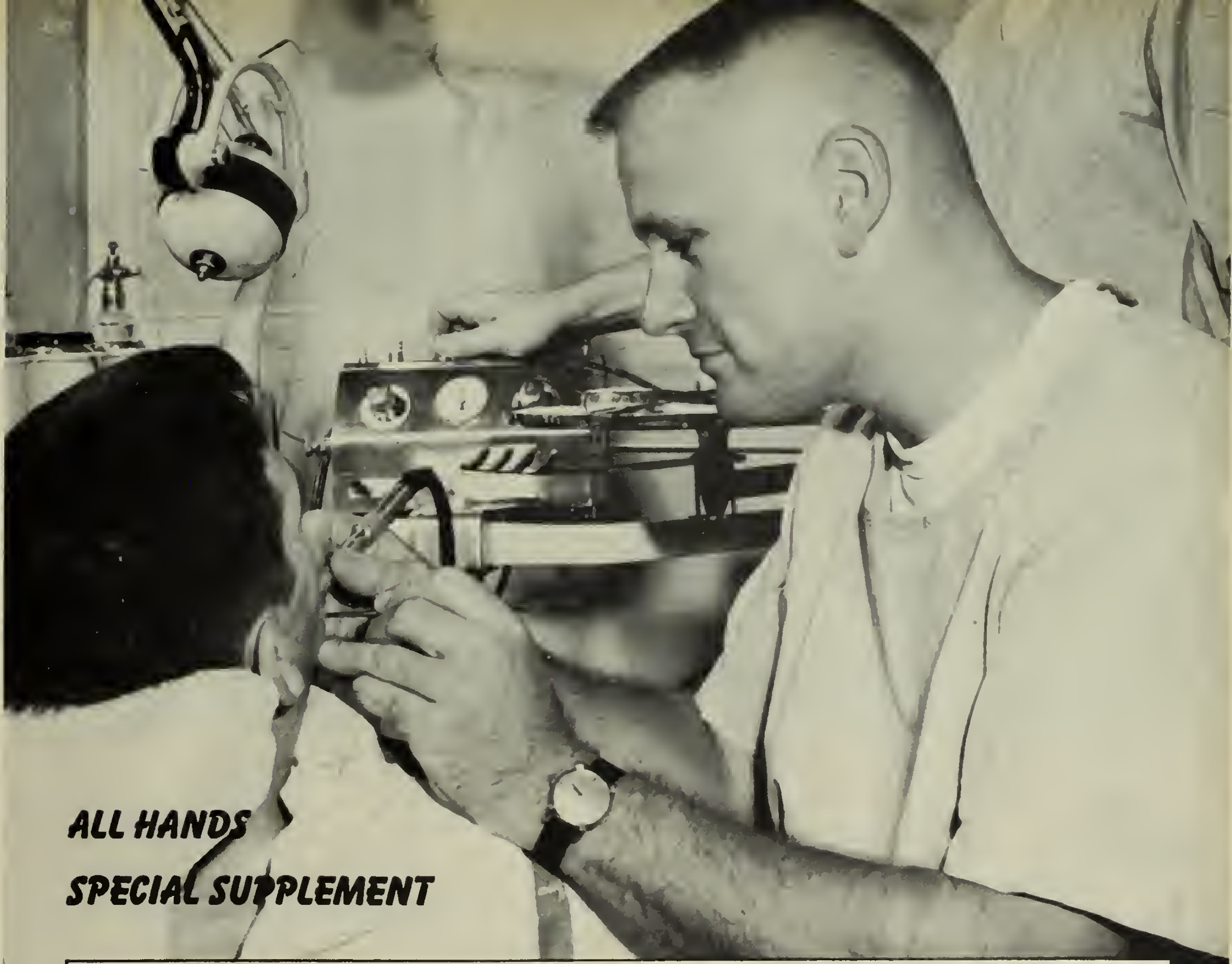
The Poles is another of the *Life* series in which the editors give you an intensive, highly photogenic treatment of a larger-than-life subject. The results can't help but be a little less than intensive but, with the limited space at their disposal, the editors of each book of the series make every word work full time. Willy Ley is no exception. His chapter on the great Antarctic laboratory, and his Do's and Don'ts will be of considerable interest to Navymen.

In connection with adventure and far-away places, you might take a look at **The Webfooted Warriors,** by Herbert Best. As almost everyone knows, the title refers to the UDT men of the Navy, and Best has done quite well by them, indeed. It's a small group—less than 350 at the present moment—yet upon the flippers of these men could rest the whole success of an invasion or even of a defensive action. This book describes their work, their training, their achievements in past action, and how they are preparing for the possible combat conditions of the future. All this is told in such a manner that, were we not thoroughly chairbound from fighting too many battles of the Potomac, we would seriously consider the qualifications. As Best points out, if the amphibious force is the spearhead of invasion, then the UDT is the tip of that spearhead. As Best also points out, UDT men are not to be confused with divers or more-or-less routine frogmen. In his discussion of the future of UDT, he brings up the possibility of actual sea-floor warfare. If you consider yourself of the tough, he-man type, take a look at this.

Not quite as gee-whiz, but equally important to survival are the subjects of two other books—**Cloak and Cipher,** by Dan Tyler and Martha Waller, and **Partisan Warfare,** by Otto Heilbrunn. Since Julius Caesar first made a science of communication by code, history—especially military and political history—has frequently hinged on the successful communication of plans by secret writing. Particularly in World War II did the use of codes (and the cracking of codes) play an important part. *Cloak and Cipher* not only covers the history of codes, but analyzes major code systems, including electronic codes, and gives directions for building secret means of communication, from the simplest form to highly elaborate codes and code machines. For the do-it-yourselfer who likes puzzles.

Partisan Warfare is a study of modern guerrilla warfare, in which the author takes his examples from the most notable guerrilla wars of the past decade and attempts to draw generally applicable conclusions. He analyzes the strategic and operational aspects, guerrilla and anti-guerrilla tactics and techniques, relations with the regular army and with the population and, as a relatively new twist, gives some thought to the role of air power and use of nuclear weapons. Shudder-making.

For our fiction selection this month, who can miss? It's another Hornblower selection; **Hornblower and the Hotspur,** by C. S. Forester, to be precise. As anyone knows who has ever read any of the Hornblower yarns, Forester is capable of writing some of the best sea stories of any living writer. This time, the narration picks up the seadog off the French coast at a time when Napoleon is seriously considering a massive invasion of England. The plot you can finish yourself, but you can never, no never, match Forester's battle scenes and just pure style.



ALL HANDS SPECIAL SUPPLEMENT

NAVY DENTISTS

Half a Century of Service

The following report is adapted from a lecture on the "History of Naval Dentistry" given by Rear Admiral R. W. Taylor, DC, USN, *which was also published in more complete form in the Journal of the American College of Dentists, pp. 195-208, Sept. 1959, Vol. 26, No. 3.*

SOME 50 YEARS AGO, the Secretary of the Navy was authorized by Congress to "appoint not more than 30 acting assistant dental surgeons to be a part of the Medical Department of the U. S. Navy." Rarely has the Navy, or the nation, received a better bargain. Since that time, dental officers have been saying "Open wider please," filling cavities, and extracting aching molars and incisors to the mutual satisfaction of all concerned.

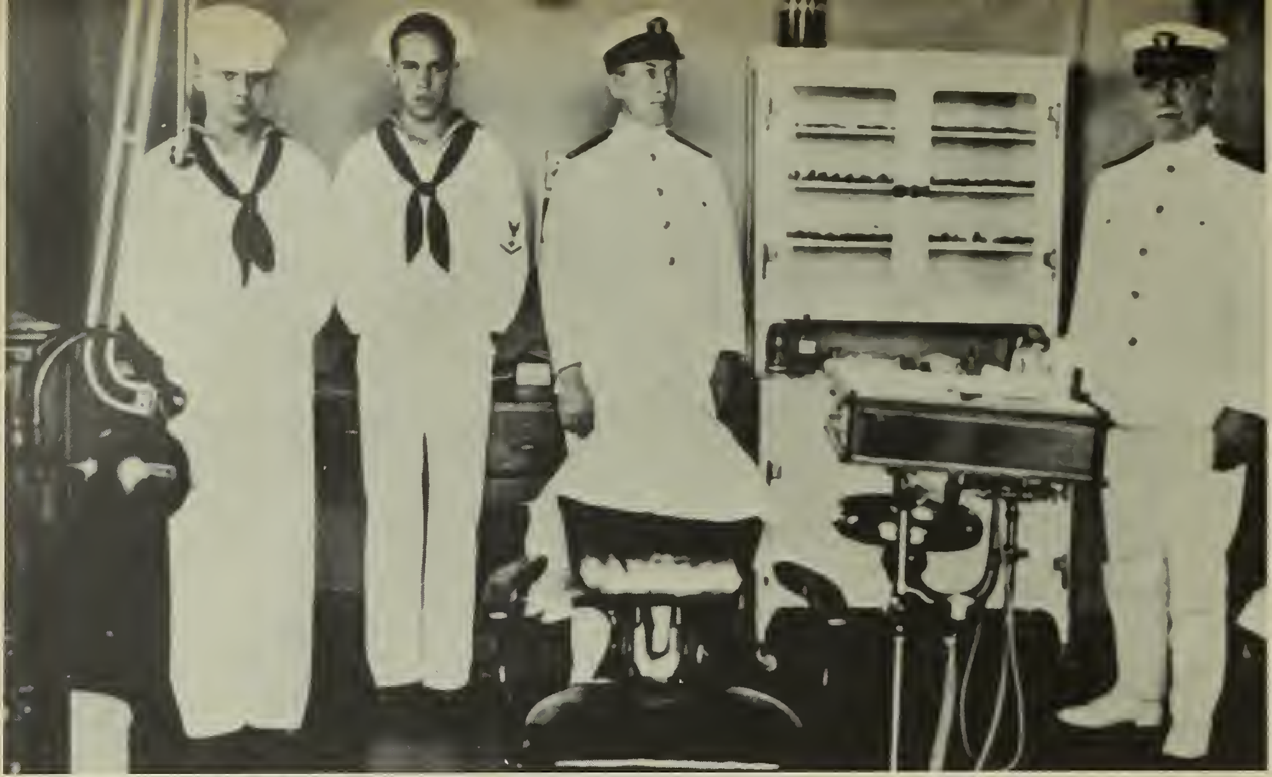
It wasn't always that simple. For many years in the early days of the Navy, the powers that be were firmly convinced that dental care for Navymen was simply another useless and expensive gadget. If any dental work was *really* needed, the ship's surgeon was sufficiently qualified to handle it. If he wasn't, he could learn.

At that time, each ship acted more or less independently under a roving commission, and there was no formal medical department in either individual ships or the Navy as a whole. It was left to each commanding officer to find his own medical personnel which, under the most favorable circumstances, might possibly include a ship's surgeon, surgeon's mate, and loblolly boy.

WITHIN THE FIRST FEW DECADES after establishment of the Navy, Congress authorized the appointment and commissioning of medical officers in the same manner as other officers, and permitted their assignment to ships and naval stations. It was not until 26 Feb 1811 that naval hospitals were authorized, although one had been established in Sicily in 1806, and another in New Orleans in 1810.

As might be expected, little attention was given to the dental problems of naval personnel throughout this period. Any measures taken for the relief of dental pain stemmed from such knowledge that the medical practitioners may have inadvertently accumulated.

It was not until about 1845 that the first advocate of military dentistry appeared in the person of Dr. Edward Maynard, a practicing dentist of Washington,



OLD-TIMERS — Dental officers and enlisted helpers pose by their equipment back in 1925.

D. C. Although reaction to Dr. Maynard's proposals was on the apathetic side, he did obtain the support of President Fillmore.

Neither the Secretaries of War or Navy were enthusiastic and ensuing correspondence between the Secretary of the Navy and his Chief of the Bureau of Medicine and Surgery eight years later would indicate that both were still more interested in finding obstacles to the proposal than in impartially weighing the possibilities.

During the Civil War, there was still a lack of formal provisions for dentistry in the Navy, although a limited number of hospital stewards with varying degrees of training in dentistry were enlisted to provide dental care. However, these men did not usually remain in the service beyond their original enlistments because of the lack of opportunities for training and advancement.

SCHOOL DAYS — Dental technicians learn how to repair equipment at the Naval Dental School.

THE EARLIEST APPROPRIATION in the Navy which was intended specifically for dental care was authorized by Congress in 1880. At that time, $1600 was allotted for the employment of a civilian dentist at the Naval Academy.

This, obviously, was not adequate. The Secretary of the Navy, in 1902, cited many pathetic instances of suffering and even death in two cases owing to a lack of dental treatment and, as a result, the first bill for contract dental surgeons was introduced, but not considered by Congress. Although authority had not been granted to appoint such contract dentists, in 1904 Dr. E. E. Harris became the first graduate of a dental school to be enlisted as a hospital steward. Dentists in this category, who received grossly inadequate pay, in many instances enlisted for travel opportunities without any intention of shipping over after their first enlistment expired.

A picture of the status of dental care as it existed in the Navy four years before the establishment of the Dental Corps in 1912, was described by Dr. Richard Grady, who was then the Naval Academy dentist, in a lecture:

"Government ships are provided with dental cases which are used by the surgeons and hospital stewards, some of whom have taken courses in dentistry. There is no room on ships for dental work, or for chair, cabinet or engine. If located in or near the sick-bay, the dentist could work on bright days only. As to living quarters there might be trouble."

AS A CULMINATION of the many previous recommendations and actions, President Taft signed an Act of Congress on 22 Aug 1912, which authorized the appointment of not more than 30 assistant dental surgeons to be part of the Medical Department of the Navy. Officers so appointed were limited to the relative rank of lieutenant (junior grade). The Act also authorized the Secretary of the Navy to appoint acting dental surgeons for temporary service, provided that the total strength of the Dental Corps did not exceed the proportion of one to each 1000 of the authorized enlisted strength of the Navy and Marine Corps.

Within five years of its inception, and before the Dental Corps reached maturity, World War I required rapid expansion of the Corps from its 30 dental officers at the outbreak of hostilities to a peak of over 500 in 1918.

The Corps was in the thick of things. The first commissioned officer of the United States Navy to meet his death in land fighting overseas was Lieutenant (junior grade) Weeden E. Osborne, DC, USN. He was killed in action on 6 Jun 1918 near Bois de Belleau, France, while attempting to rescue a wounded man. He was honored posthumously through the award of the Medal of Honor and the Distinguished Service Cross. Later, the destroyer USS *Osborne* (DD 295) was named in his honor.

THE DENTAL CORPS grew rapidly in the decade following World War I. The Surgeon General, in 1919, attested to the great value of the work accomplished by the Corps when he said: "Few remedial measures of recent years have given more satisfaction to enlisted men than the establishment of this Corps."

During the following year, previous restrictions were removed and dental officers were authorized to render prosthetic treatment. Soon thereafter, dental prosthetic laboratories were established in some of the ships and at the larger shore facilities.

It became increasingly apparent that, if a high level of dental service were to be maintained, some means must be provided for dental officers to keep abreast of advances in the theory and practice of dentistry. This need was first met through the establishment, in 1923, of the Naval Dental School as a department of the U. S. Naval Medical School in Washington, D. C. The Dental School provided postgraduate training for dental officers and trained enlisted personnel of the Hospital Corpsman rating to serve as dental assistants.

TODAY — U. S. Naval Dental School is housed in this building at National Naval Medical Center.

In 1923, a Dental Division was established, within the Bureau of Medicine and Surgery, with a dental officer in charge.

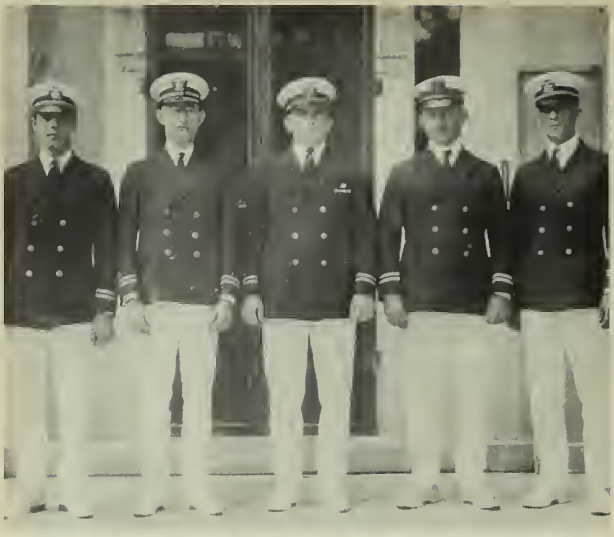
THE SURGEON GENERAL'S report of 1924 noted that "Today it is generally recognized that dental service is an important factor in the conservation of bodily health and that the physical and mental well-being of an individual are in a decidedly large degree dependent upon a healthy condition of the mouth."

This is in decided contrast with the views of the Surgeon General of 1853 who felt that all that was essential to the dental health and comfort of the sailor was then understood and practiced by the medical officer.

The benefits of dental care were accompanied by greatly increased demands for this health service, but it was not until 22 Jul 1935, that an Act of Congress authorized the long needed relief. The Act provided for the appointment of dental officers in the ratio of one for each 500 of the actual number of officers and enlisted men of the Navy and Marine Corps. The immediate effect of the Act was to increase the number of dental officers from 186 to 234 officers.

World War II brought about the greatest expansion the Dental Corps was to experience. On 7 Dec 1941, there were 369 Reserve and 390 Regular dental officers

BACK THEN — Navy dentist gives instructions in oral hygiene to recruits at Hampton Roads, Va., in 1918.



FIRST CLASS at the Naval Dental School poses for photo in 1923. *Rt:* The school looked like this then.

on active duty at 347 dental activities. At the end of the war, the Corps had expanded to more than 7000 dental officers, assisted by more than 10,000 technicians, operating at 1554 dental activities.

As in World War I, the Corps paid a price. During the war, 21 dental officers were killed, 16 wounded in action and 14 became prisoners of war. Also as in World War I, many honors were earned. These ranged from the Purple Heart to the naming of three escort vessels, USS *Crowley* (DE 303), *Tatum* (DE 789) and *O'Reilly* (DE 330) after Dental Corps officers killed during the war.

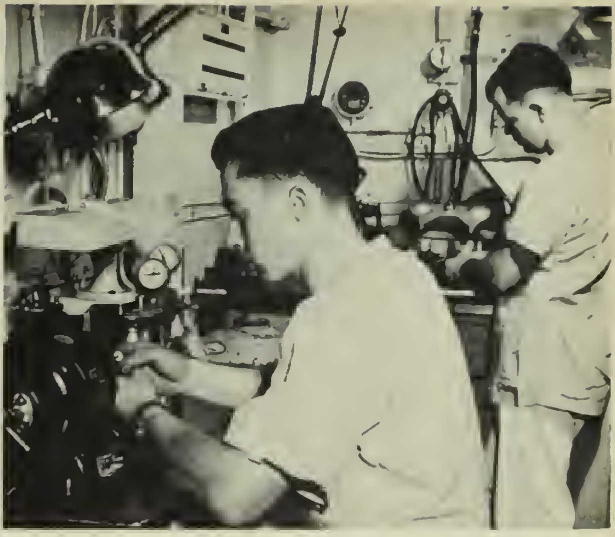
DURING WORLD WAR II, approximately 30 million "restorations" were inserted, 4.2 million teeth were extracted, 8.2 thousand fractures were reduced, a half-million dentures and bridges were constructed, and eleven hundred ocular prostheses made. At many stations it was necessary to operate on a shift system to make maximum use of the available dental facilities.

The year 1943 has particular significance to the Dental Corps from a professional standpoint. Early in World War II, it was found that bad teeth were the cause of a large number of rejections of potential Navymen. This situation forced the almost complete elimination of dental standards for enlisted personnel and resulted in an overwhelming increase in the requirements for dental care. No provision was made for a compensatory increase in the number of dental officers to cope with the tremendous workload which ensued.

The dental functions in the Bureau of Medicine and Surgery were completely reorganized in 1945 and an office of Assistant Chief of the Bureau for Dentistry was established and an officer of the Dental Corps, in the grade of rear admiral, was detailed as the Chief of the Dental Division.

The greatest professional requirement of Navy dental officers is to render treatment in general dentistry. Training in this field is provided through rotating intern-

TENTING — Marine patient is attended to in 'jungle office' during WW II. *Rt:* Tent serves as dental clinic in '44.



DENTURES for the Fleet are prepared in prosthetics laboratories ashore and on some larger ships.

ships, postgraduate courses at the U. S. Naval Dental School, and various short postgraduate courses.

Basic training of enlisted personnel to assist dental officers in dental operating room and prosthetic laboratory procedures is offered through courses conducted at the U. S. Naval Training Center, San Diego, Calif. Advanced training for general and prosthetic dental technicians is provided at the U. S. Naval Dental School, Bethesda, Md. This school also trains dental technicians in procedures for the repair and maintenance of dental equipment.

IT IS DIFFICULT to say exactly when dental research began in the Navy because, in the early days of the Dental Corps, the occasional clinical investigations which were conducted were carried on without formal authorization. However, in 1942, the Research Division was established in the Bureau of Medicine and Surgery, Washington, D. C. Since then, there has been a constant pursuit of dental investigations within the Navy.

The latest major problem in naval dental treatment came when the Dependents' Medical Care Act, Public Law 569, became effective on 6 Dec 1956. On that date approximately 130,000 Navy dependents overseas and in remote areas of the United States were made eligible for routine dental care. Thus, for the second time in its history, the dental clinics became deluged with demands for dental care without authority for increases in dental personnel. In spite of these difficulties, approximately eight million diagnostic and treatment procedures were furnished at 450 dental facilities ashore and afloat in the first year of the program.

The early goals, which focused on the establishment and administration of a high type of Navy-wide dental service, have been achieved. They are now a part of the history of the Naval Dental Corps. However, the Dental Corps is still working to improve the caliber of dental care for service personnel and their dependents, and to contribute its share to the progressive improvement of dentistry and the dental profession.

AT WORK — Dentist demonstrates correct procedures. *Rt:* Ship's dental clinic takes care of crew member.

TAFFRAIL TALK

Enlisted men serving with NARTU (Naval Air Reserve Training Unit) at Lakehurst, N. J., have come up with a corking good way of honoring a retiring shipmate. It's a vast improvement, we feel, over the what's-the-hurry-here's-your-hat brush-off all too frequently accorded retiring Navymen these days.

At Lakehurst recently Aviation Machinist's Mate first class Henry P. Hofstetter was called front and center before the ranks of his shipmates upon the occasion of his transfer to the Fleet Reserve and presented an American flag—"A flag you have served so honorably throughout your naval career," Hofstetter's skipper, CAPT F. M. Duffy, USN, told him.

Hofstetter's fellow crew members got together to purchase the flag, and are hopeful that their idea will merit serious consideration Navy-wide.

★ ★ ★

For those of us who shed a few salty tears when the Navy decommissioned the last of its blimps, this brings back the nostalgia. Not long ago a one-man, hot-air balloon was tested before officials of the Pacific Missile Range at Point Mugu, Calif., and the test pilot for the balloon pronounced the flight "an unqualified success." Earlier, he had demonstrated the balloon, developed by private industry, to a group of scientists and engineers at China Lake, Calif. One never knows. Free-ballooning stirs up interest, even in the atomic era.

★ ★ ★

Robert E. Chilson, SA, a student at Instrumentman "A" school at Great Lakes, is a pro on the go. He commutes on weekends between Great Lakes and the Milwaukee USO and believes getting there is half the fun, especially by his mode of transportation—a bicycle.

He rides an Italian-made bike with twice as many gears as a five-gear sports car. The 20-pound bike has other features, including adjustable racing handlebars, flick-of-the-wrist drop-off wheels, and specially designed metallic racing sandals on the pedals.

In Florida, his home state, he placed second in two state championship races. He hopes eventually to qualify for the Olympics.

★ ★ ★

When the operations officer at NAS Cubi Point, P. I., received a message saying "Sinatra and Rogers to arrive Cubi Point," he called photographers and arranged transportation. The public information officer came back from leave.

Newspapers had said Frank Sinatra and Jimmie Rogers were on a Far East tour, and the PIO had preparations complete before the 1:45 p.m. arrival time. The plane had to return to Iwakuni, Japan, but the flight was rescheduled to arrive two days later. In the meantime a more complete message said, "Marine Corporals Sinatra and Rogers due to arrive Cubi."

As it turned out, the celebrities were Martin P. Sinatra and Robert H. Rogers, both Marine corporals attached to the staff of COMCARDIV 5 aboard USS *Coral Sea* (CVA 43), and not even distant relatives of the famous singers.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Information Bulletin, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau should be kept informed of changes in the number of copies required.

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- **AT RIGHT: BEHIND THE ATOM—** Machinist's Mate Third Class Darrell G. Guidry, USN, applies his technical training as part of the team of Navymen that keep our nuclear-powered ships on the go in defense of the nation. ➡

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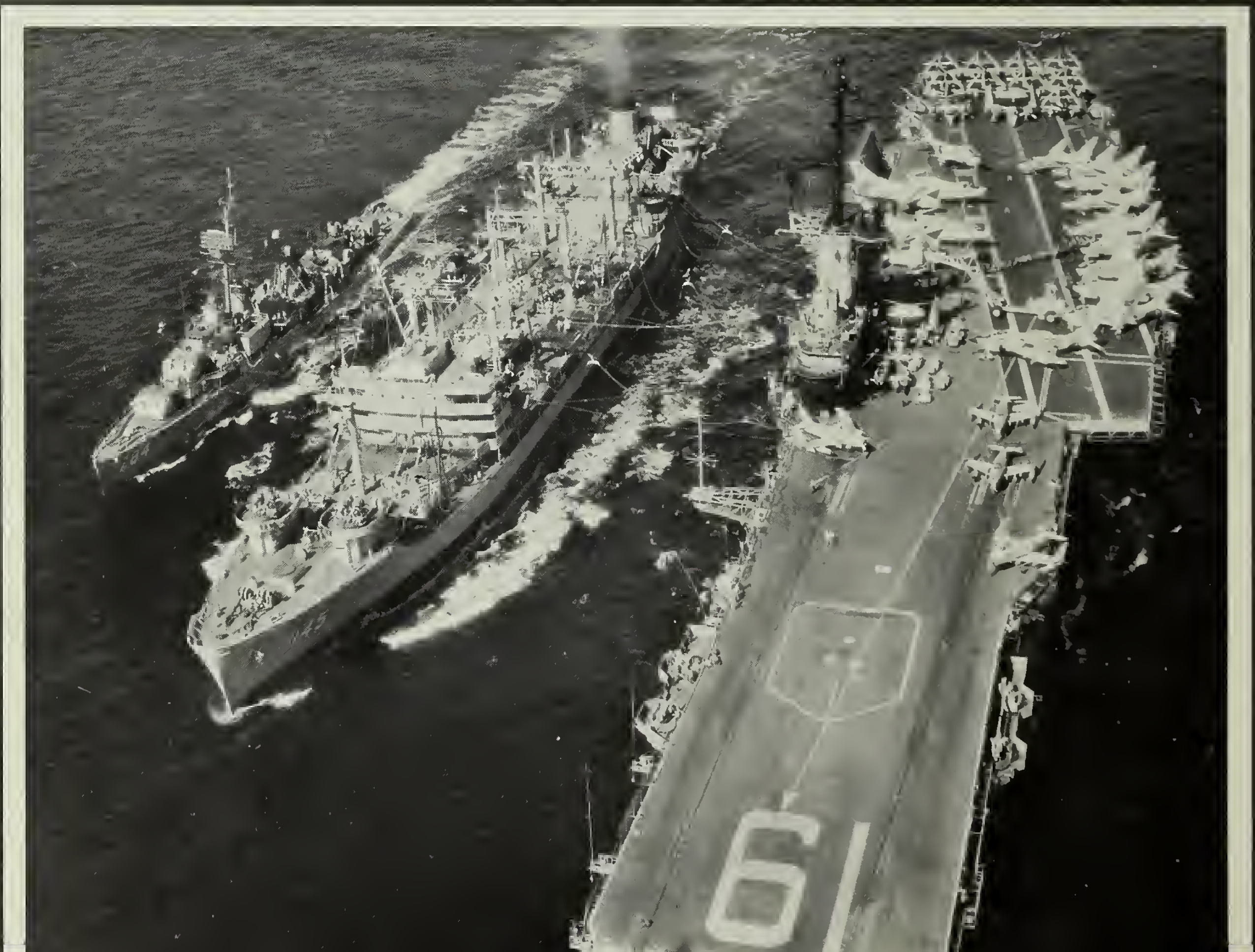
With A Smile



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NOVEMBER 1962

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

NOVEMBER 1962 Nav-Pers-O NUMBER 550

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel
REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel
CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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French Crawford Smith, **Reserve**

- **FRONT COVER: FOUR FOR FOUR**—Crew members watch J. R. Baker, DC1, USN, touch up another hashmark under the Battle Efficiency 'E' of *USS Courtney* (DE 1021), marking the fourth consecutive year their ship has captured the award.
- **AT LEFT: SCENIC ROUTE**—Second Fleet flagship *USS Newport News* (CA 148) cruises through the German countryside as she transits the Kiel Canal on way to England.

- **CREDIT:** All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

BEACH PARTY — Jeeps and heavy equipment of SEATO task force hit the beach during exercise Tulungan.

Amphibious War Game Is

VISUALIZE this scene.

A guerrilla force from Lusob has infiltrated Tahimik, a Southeast Asia country. Within a relatively short time these guerrilla troops have not only seized control of a central area of this small country, but have openly challenged the military forces.

The government of Tahimik has asked SEATO (The Southeast Asia Treaty Organization) for help and SEATO has responded by ordering a combined expeditionary force to make an amphibious landing on the coast of Tahimik in the area controlled by the guerrilla force from Lusob. The SEATO force has been ordered to establish a beachhead in Tahimik and to help restore control over that area to the government of Tahimik.

This was the conjured situation for SEATO's exercise Tulungan which took place earlier this year in the Pacific. The coastal area of western Mindoro, Philippines, was the objective area of Tahimik.

The mission of Tulungan, SEATO's first exercise in 1962, was to develop mutual confidence among the participating forces from the Republic of the Philippines, the United States and Australia and to acquaint themselves with each other's equipment, tactics and techniques. It also furthered good-will and fostered new friendships among the troops of the member nations. This also increased their ability to work together easily as a unified defense team.

The guerrilla force was the first group stationed. These troops were members of the Third Battalion, U. S. Fourth Marines, from Hawaii and the First Marine Company, Philippine Marine Battalion, from Manila, P.I.

They moved onto the island of Mindoro with 350 tons of supplies and equipment, plus 50 vehicles and 25 trailer-type carriers, three weeks before the amphibious phase of the exercise was scheduled. The group set up two separate camps, one three miles inland from the beach near San Jose and the other some 14 miles north of Santa Cruz. They built defenses, set ambushes, laid mine fields and constructed obstacles.

A WEEK AFTER the aggressor force had been put ashore, the amphibious force ships from the U. S. Seventh Fleet began to load 15,000 troops and their equipment at Buckner Bay, Okinawa, for the upcoming battle. Five days later the ships slipped out of Buckner Bay en route for Tahimik.

Ships of the Philippine navy loaded troops at Manila Bay and then rendezvoused with U. S. Seventh Fleet ships in the South China Sea. The combined force then continued toward the exercise area.

The ships participated in a live firing exercise en route to Mindoro and the troops took part in a dress rehearsal of the amphibious phase of the upcoming landing at Bataan. It was a turn-away simulated landing which included the assault helicopters. This rehearsal also provided a final check for antiair, air support and naval gunfire.

While all these preparations were being made for the landing, intelligence and reconnaissance officials were busy collecting information about the capabilities of the 1500-man guerrilla force in Tahimik.

INTELLIGENCE WORK is interesting and necessary, but for one U. S. Navy photographer's mate, it was no fun, mainly because he wasn't playing the game.

The Navy photo mate, Patrick D. Hinman, PH3, USN, was assigned to take pictures of the battles in Tahimik. He had his camera, was well decorated with press armbands and had enough identification to satisfy anyone—he thought.

Hinman began his assignment by

LOOK OUT — Philippine and U.S. troops make amphibious landing. *Below:* Marines land via copter and line.

Not Play

arriving in the country by a plane which made an unscheduled landing at Mamburao airfield. As soon as he debarked, his plane took off again. Hinman immediately headed toward a nearby grass hut to begin his photo coverage of the operation.

Before he had gone far he was surrounded by three men who put him under arrest. The next thing he knew he had the lead in a one-act interrogation session.

He explained that he was there only to take official photographs of the operation. What Hinman didn't know, however, was that two Navymen with Underwater Demolition Team 12 had told that same story a few days earlier and got away with it for a short time. They, too, wore dress Navy uniform and had press armbands and a camera. They were first allowed to pass, but were later arrested and identified as members of an intelligence team.

Hinman somehow talked his way out of trouble. Because of the long delay, and therefore loss of many photographs, Hinman asked for a safe pass. This would have let him get a few pictures without further interruptions, and would also have given him something besides unexposed film to present to his chief when he returned. Hinman's request

THE AGGRESSORS, played by U.S. Marines, come ashore for the exercise.

LOOK WHO'S LOOKING — SEATO observers watch the amphib operation. *Below:* LST lands artillery on the beach.

IN TRAINING — South Vietnamese sailors learn to man shipboard guns.

was denied. Perhaps his interrogators were not impressed with the photographer's story after all.

On D-DAY THOUSANDS of SEATO troops swarmed ashore to rid Tahimik of the guerrilla force which had been infiltrating the fictitious country.

Soldiers of the Philippine army's First Battalion Combat Team hit Blue beach from landing craft while U. S. Leathernecks from the Second Battalion, Ninth Marines, landed inland behind San Jose where they had been transported by helicopters.

Simultaneously, wave after wave of men of the Third Marines landed across Red beaches 50 miles to the north of San Jose in the Santa Cruz area.

Aircraft from the Philippine air force, First Marine Air Wing and Royal Australian Air Force planes strafed suspected enemy shore positions and shore lines just ahead of the landing troops.

Veterans of World War II or Korea found today's warfare methods somewhat different from those they had seen in past landings. As the men landed on the beaches of Mindoro in the central Philippine Islands, they found almost no resistance. The advancing troops could have almost walked ashore upright from their landing craft.

Instead of waiting on the beach, the guerrilla troops were entrenched further inland.

About the only obstacles in the beach areas were charges of explosives that had been buried under the sand to simulate enemy fire. Only a few shots were exchanged in the beach area.

While the landing craft and other amphibious vehicles landed on the beach, U. S. Marines were being heli-lifted into selected landing zones in an area northwest of San Jose.

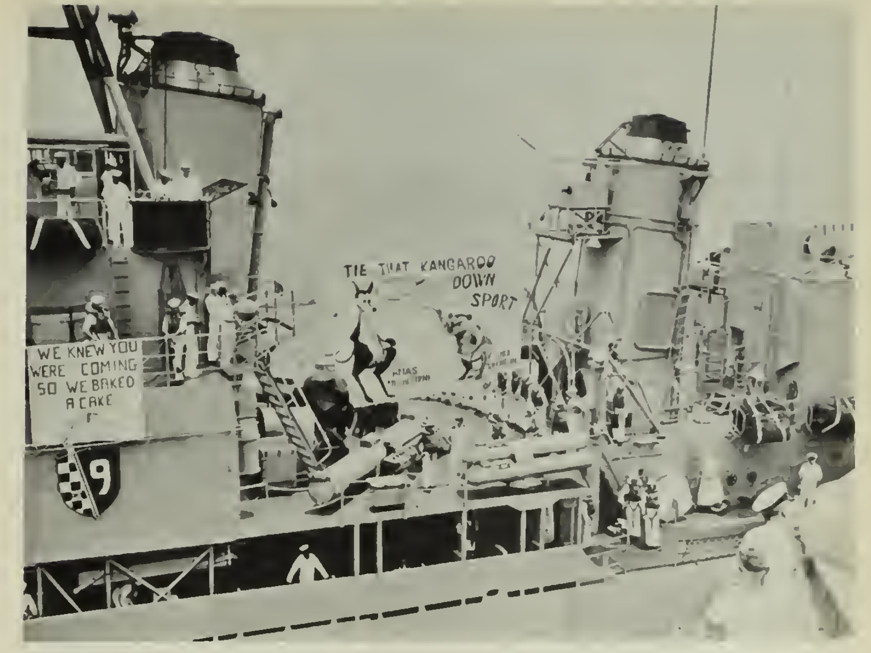
The first objective of the invading troops was to secure the San Jose airfield. This was done within an hour after the assault. Men and equipment from the First Marine Aircraft Wing then began to set up an aircraft control tower and landing aids. Later that day, the field was ready and the U. S. Air Force flew in an additional battalion landing team of U. S. Marines from Okinawa to reinforce the troops that had landed over the beaches.

During the battle, the guerrilla troops engaged the SEATO forces on the beaches, in creek beds, in the mountains, at rivers, as well as in jungle terrain, marshlands and desert areas. They attacked from ambush, used hit and run methods, sneak attacks and many other guerrilla tactics.

More than 37,000 men from the United States, Republic of the Philippines and Australia, and some 70 ships and 400 aircraft participated in Tulungan.

Needless to say, the SEATO forces won the simulated battle, but not without a struggle from the 1500-man guerrilla force.

For SEATO, this was exercise number 20. During these exercises, SEATO has practiced many aspects of specialized military strategies that are essential to the defense of that area of the world.


WE KNEW YOU WERE COMING SO WE BAKED A CAKE
TIE THAT KANGAROO DOWN SPORT
9

GREETINGS — Destroyermen of USS *Lyman K. Swenson* (DD 729) meet Australian carrier with cake and humor at sea during SEATO exercise.

These exercises started as simple demonstrations of coordinated movement maneuvers and have gradually developed into complicated operations such as Tulungan. Each exercise has gone a step further and has involved larger forces and more complex planning. Last year, for instance, exercise Pony Express practiced amphibious assault landings, and established a beachhead. This year's Tulungan went one step further and simulated fighting against guerrilla troops.

Cooperation Helps SEATO Protect Its Members From Attack

The Southeast Asia Treaty Organization is an alliance between Australia, New Zealand, Philippines, United Kingdom, France, Pakistan, Thailand and the United States, which was created by a treaty signed in Manila, P.I., on 8 Sep 1954. It provides for the common defense by its members against armed attack or a threat to their peace and security. (When the treaty was written Laos, Cambodia and Vietnam were extended the protection of the alliance by virtue of a protocol appended to the treaty.)

Military defense is the keystone of SEATO, although economic, social and cultural activities form a part of the structure and are designed to strengthen member countries by promoting economic progress and social well-being.

The highest authority in SEATO is the Council of Ministers, which is composed of the ministers for foreign affairs of the member countries. At its annual meeting, the council sets broad policies, reviews the program of activities and gives political guidance to the military authorities.

More on the working level, SEATO Council Representatives form a group which meets monthly, or more often if necessary, in Bangkok. In most cases, council representatives are the ambassadors to Thailand from their respective countries.

The Secretary General of SEATO is the head of the permanent civil offices at SEATO Headquarters in Bangkok, Thailand, and coordinates the various activities of the organization.

The highest military authority in SEATO is the Military Advisors' Group. It is made up of high ranking military officers from member countries. This group meets twice a year and is responsible to the SEATO Council.

The Military Planning Office, located at SEATO Headquarters, works under the direction of the Military Advisors' Group. This staff of senior officers of the Army, Navy and Air Force of each member country is headed by a Major General with the title of Chief Military Planning Officer. Military advisors' representatives assigned to SEATO Headquarters participate in the work of the Military Planning Office.

One of the activities of the MPO is to organize several exercises every year so that the armed forces of member countries are more closely knit into a unified force to achieve specific goals. These exercises further cooperation and good-will among military forces of the participating member nations.

FRIENDS — Australian sailor chats with U. S. Navyman during a break in combined naval exercises.

THE NAVY DOWN UNDER IS

Fifty-one years ago a Navy was born in the Southwest Pacific. It has fought in every major war since, aiding and supporting the United States and her allies. Called the RAN for short, it is the Royal Australian Navy.

For more than 100 years before the RAN was created, the British Navy had provided sea defense for Australia. But toward the end of the 19th century, the states of Queensland, Victoria and South Australia created their own navies for coastal defense, and New South Wales had training facilities for a local volunteer naval brigade.

However, the Admiralty in London had final responsibility for Australia's naval defense. At the urging of the Australian people, plans were made for armed forces of their own when the Australian Commonwealth was established in 1901.

In 1909, a conference was held in London to discuss defense of the Empire, and the Admiralty agreed to the formation of the Australian Fleet Unit. One of the men attending the conference was Sir William Creswell, known as the "Father of the Australian Navy." He was born in Gibraltar in 1852 and entered the Royal Navy as a cadet in 1865, serving until 1878. After spending several years in Australia, he joined the South Australian State Navy in 1885 as a lieutenant commander. In 1907 he became Director of the Commonwealth Naval Forces. He was also Director, Naval Board of Administration, when he attended the Naval Conference in 1909.

Two years later, on 10 Jul 1911, the Australian Fleet Unit became the Royal Australian Navy. Creswell became the First Naval Member and kept this office until he retired in 1919. Vice Admiral Sir William Creswell died in 1933.

The RAN's first ships were delivered in 1913, when the cruisers HMAS *Australia, Sydney* and *Melbourne,* and the destroyers HMAS *Warrego, Yarra,* and *Parramatta* steamed into Sydney harbor.

It wasn't long before the young RAN received its baptism of fire.

Within a year it was involved in World War I, scoring a victory when the light cruiser *Sydney* destroyed the German raider *Emden* off Cocos Island in the Indian Ocean. Fighting in all theaters during WW I, the RAN lost 85 officers and men. Its only ship losses were two submarines.

By 1923, the fleet that had been built during WW I was reduced to eight ships, and by 1930 only four were in commission. But in 1933, the RAN began building up its strength again until it had six cruisers, five destroyers and two sloops at the beginning of World War II in 1939.

During WW II, Australian ships served around the globe. In the Mediterranean, the second HMAS *Sydney* destroyed the Italian cruiser *Bartolomeo Colleoni.* Australian ships were part of the "Tobruk Ferry" in the Mediterranean. When Japan entered the war, the RAN concentrated its efforts in the Pacific, but kept fighting in other parts of the world.

In late 1941 the WRANS (Women's Royal Australian Naval Service) was established.

War wasn't all success for the sailors from Australia. The year 1942 was particularly disastrous. HMAS *Perth* was sunk in the Battle of Sunda Strait on 1 March . . . *Yarra* was sunk by Japanese cruisers . . . *Vampire* went to the bottom after a Japanese dive-bomber attack off Ceylon . . . the depot ship *Kuttabul* was sunk . . . *Nestor, Canberra* (see box), *Voyager,* and *Armidale* were lost.

But the same year, RAN cruisers *Australia* and *Hobart* were part of the group that faked the Japanese out of position in the Battle of the Coral Sea, enabling the U.S. carriers *Yorktown* and *Lexington* to stop the Japanese advance toward Australia.

In 1943 HMAS *Shropshire* was commissioned to replace *Canberra,* and later, *Shropshire, Australia, Arunta* and *Warramunga* took part in landings at New Britain Island in the Pacific. HMAS *Gascoyne,* the first Australian-built frigate, was launched in Sydney.

Shropshire and *Arunta* took part in the Battle of Surigao Strait in 1944. This was the last major naval surface battle of WW II.

RAN ships participated in Philippine and Borneo landings, the Burma campaigns and the landings on the Japanese home islands in 1945. When Japan surrendered in August 1945, the RAN had lost 219 officers and 1951 enlisted men, along with 14 ships.

Naval occupation forces in Japan included RAN ships.

In 1948 the RAN's fleet air arm was established and the aircraft carrier HMAS *Sydney* was commissioned.

DURING THE KOREAN CONFLICT, nine ships took part in 13 tours of duty, and nearly 5000 officers and men fought for the UN cause. RAN ships steamed close to 463,000 miles, and their big guns blazed away with more than 26,000 rounds. *Sydney* took Navy squadrons to Korea, where Australian pilots got a workout, flying thousands of sorties.

In 1955 the aircraft carrier HMAS *Melbourne*, the RAN's steam-catapult, mirror-landing flagship was commissioned. She embarked the new turboprop *Gannet* and the all-weather jet fighter *Sea Venom*, which had replaced the older *Firefly* and *Sea Fury* models. *Gannet* is still in use with the fleet air arm's antisubmarine force.

THE TOPS

Today's RAN is a small, but mobile, force. In 1960, Australian ships visited more than 40 overseas ports, most of them in Asia. Two RAN ships are always on duty with the British Commonwealth Strategic Reserve in Singapore.

Australian ships regularly join with the navies of the SEATO (Southeast Asia Treaty Organization) countries in training exercises. SEATO, an alliance formed between Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom and the United States, was born by treaty in Manila, P. I., in September 1954. SEATO nations have pledged aid to one another in the event of an armed attack upon any member or a threat to the peace and security of Southeast Asia.

AUSTRALIA'S NAVY concentrates the major share of its efforts these days in the field of antisubmarine warfare. It has 19 ships in commission, with two brand new frigates

SHARP SHIPS — Destroyer *HMAS Vampire* is one of three in her class. *Below:* Frigate *HMAS Yarra* goes through her paces off Australian coast.

TOGETHER — Units of Australian fleet that took part in SEATO exercise are *(left to rt.) HMAS Queenborough, Voyager, Vendetta,* and *Melbourne.*

HOOKED—Royal Australian Navy *Venom* fighter lands on HMAS *Melbourne.*

that will soon be added to the fleet.

In 1961 the frigates HMAS *Yarra* and *Parramatta* were commissioned. They are 2200-ton ships, modified versions of the Royal Navy's *Whitby* class. Carrying antisubmarine mortars, the ships were built in Australian yards. Both they and the two being built are to be fitted with the British close-range antiaircraft missile, *Seacat.* These frigates have a top speed of over 30 knots.

Besides these two new frigates, Australia's combat fleet is made up of three *Daring* class destroyers similar to the *Daring* class of the British fleet; three "Q" class antisubmarine frigates; a fleet training ship, the *Battle* class destroyer HMAS *Anzac;* and *Melbourne,* the flagship.

HMAS *Vampire, Voyager* and *Vendetta* are the 2800-ton *Daring* class destroyers. They carry six 4.5-inch guns, six 40mm guns, five 21-inch torpedo tubes and a three-barrelled antisubmarine mortar. These ships are used for air defense and surface gunnery as well as sub hunting, and are capable of speeds over 30 knots.

More antisubmarine punch is provided by the three "Q" class frigates, HMAS *Queenborough, Quiberon* and *Quickmatch.* These are 2000-tonners armed with antisubmarine mortars, two four-inch guns and two 40mm antiaircraft guns. Originally built as destroyers in Britain during WW II, they have been converted to antisubmarine frigates in Australian shipyards during the last eight years.

HMAS *Anzac* is a 2840-ton *Battle* class destroyer which carries triple-barrelled antisubmarine mortars, four 4.5-inch guns, and 12 40mm antiaircraft guns. She is a post-WW II ship, built in Australia.

Melbourne, with her *Gannet* and *Venom* aircraft, is regarded by the RAN as the most powerful unit in the fleet. The *Venoms* can support ground troops and protect convoys from marauding aircraft, while the *Gannets* hunt and destroy enemy subs, lay mines or attack enemy shipping and shore targets.

Meanwhile, *Sydney* has been converted to a fast troop transport.

These combat ships are backed by support vessels ranging from training frigates to survey ships. Survey vessels are HMAS *Warrego, Barcoo, Paluma* and *Bass.* The Navy works with government officials in planning, surveying, charting and oceanographic projects. The four RAN survey ships are tackling the tricky task of charting Australia's coastline. Two ships are doing oceanographic research that may produce new information on weather trends, fishing and minerals in offshore waters.

HMAS *Anzac* gives Australia's officer cadets and apprentices their first at-sea training, and HMAS *Kimbla* helps carry out experiments in modern sea warfare. A new ASW weapon is now undergoing tests.

HMAS *Supply* is a fast replenishment tanker now commissioned in the RAN.

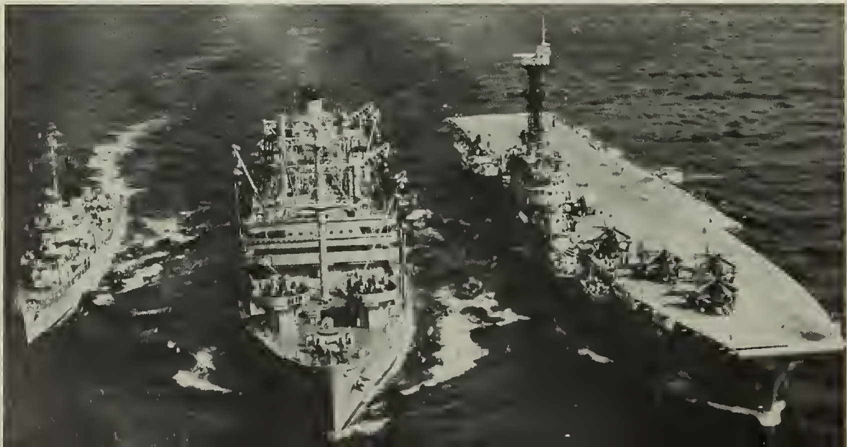
Next year the RAN plans to operate *Melbourne* as an ASW helicopter carrier. New helicopters are being obtained for this purpose. In any future war, modern submarines would almost certainly be used to try to cut Australia off from her allies. The ship-borne helicopter is now one of the main weapons that would be used to counter the submarine threat. Sub detection was once based on the sub's breaking the surface, or on listening devices picking up noises of the raider beneath the sea. But helicopters to be used by the RAN will utilize an active sonar that will send out probing signals which bounce off a submarine. This sonar device is suspended from the helicopter as it hovers above the sea. *Melbourne,* in her new role, could provide helicopters for a mobile ASW screen for convoys.

RAN planners see future destroyer escorts as versatile, all-purpose ships designed to deal with enemy submarines, aircraft or surface ships. The choice to meet these requirements is the United States' *Charles F. Adams* (DDG 2) class guided missile destroyer. The U.S. is now building two of these ships for the RAN. Their big weapon is the *Tartar* surface-to-air missile.

A new survey ship is being built to help chart Australia's long coastline.

Six men, known as the Naval Board, head the RAN. The president of the board is the Minister for the Navy, and directly responsible to Parliament and the people of Australia. Other board members are the Chief of the Naval Staff (the top post in the RAN); Second Naval Member (responsible for naval per-

FLAGSHIP of R.A.N. HMAS Melbourne refuels from USS Hassayampa (AO 145).



sonnel and training); Third Naval Member (technical services and ship construction); Fourth Naval Member (supply); and the Secretary, who is also permanent head of the Department of the Navy.

Ships of the combat fleet come under the operational and administrative control of the flag officer commanding the Australian Fleet. Normally flying his flag in *Melbourne*, he is responsible to the Naval Board.

Current strength of the RAN is about 1000 officers and 9500 enlisted men, with more than 8000 civilians providing much of the shore backing.

IN PORT — RAN's main base is located at Garden Island in Sydney harbor.

FUTURE SAILORS of the RAN have five training establishments in which they can learn the ways of the sea and current methods of naval warfare. The schools are: The Royal Australian Naval College at Jervis Bay; the Apprentices' School at Quaker's Hill, near Sydney; the Junior Recruits' Training Establishment at Fremantle; the Recruit School at Flinders Naval Depot; and the Junior Musicians' School at Flinders. In addition, there are a number of schools that give advanced specialist training to enlisted men.

The Naval College began a new and lengthier training program in 1961 to prepare cadets for service in a more technical navy. Boys in the normal entry age group of 14½ to 16½ will have three years and eight months of study, and special entries (students who have already reached enrollment standards) will have one year and eight months at the college. To provide a break in the concentrated academic studies, cadets will spend a year at sea as midshipmen, after which they will spend two years at either Britannia Royal Naval College at Dartmouth, England, or the Royal Naval Engineering College, an extension college of London University.

Apprentices' School trains 15- to 17-year-old boys to be mechanical craftsmen, specializing in naval equipment. Four years are spent at the school, with a final year at sea before graduation.

At Fremantle, the Junior Recruit Training Establishment gives a year of academic and seamanship studies to 15½- to 16½-year-old boys before they are sent to a specialist school which will qualify them for shipboard service.

Flinders Naval Depot takes Navy recruits who do not come from a specialized naval school. Recruits from 17 to 26 go through an eight-week introduction to the RAN before attending a specialty school.

Prospective musicians in one of the RAN's four bands receive up to three and a half years of training in Junior Musicians' School at Flinders. The boys, between 15 and 17 years old, enlist for nine years and graduate as Musicians First Class.

Various specialist schools are offered to petty officers, giving instruction in such diverse jobs as ASW detection, photography or atomic, biological and chemical defense.

Flinders Naval Depot is also the WRANS recruit training center. The women's service was disbanded after WW II, but reestablished as a peacetime service 11 years ago. Currently, more than 300 Wrans serve as radio operators, radar plotters, sick bay attendants, cooks, stewards, stores assistants and drivers.

Wrans enlist for either four or six years, but are released if they wish to marry. Girls are selected from the ranks for officer training.

Ships Named *Canberra*

The closeness of the Australian and U. S. navies is demonstrated by our naming a cruiser after the sunken RAN cruiser *Canberra*. The Navy's second guided missile cruiser, USS *Canberra* (CAG 2) is also the only U. S. Navy cruiser with the name of a foreign capital.

Canberra, Australia's capital, is named from an aboriginal word meaning "basin," which describes the location of the federal city in New South Wales.

HMAS *Canberra* was a 10,000-ton, 630-foot cruiser of the *County* class. When Australia declared war on Germany in September 1939, *Canberra* was one of the two RAN heavy cruisers in existence, along with four lighter cruisers.

From 1939 through 1942, *Canberra* fought with the British Fleet in the Mediterranean, and with the Royal Indian Navy bombarding Italian troops and transports along the coast of Italian Somaliland.

When war appeared imminent in the Pacific, she returned to that area and later fought alongside ships of the U. S. Fleet. She and three U. S. heavy cruisers were lost in the Battle of Savo Island in the Solomons, 8-9 Aug 1942.

The U. S. Navy commissioned USS *Canberra* as a heavy cruiser (CA 70) in October 1943. Christened by the wife of Sir Owen Dixon, Australian Minister to the U. S., she was originally laid down as *Pittsburgh*, but the name was changed to memorialize the Australian ship. In 1956, *Canberra* was recommissioned as a guided missile heavy cruiser.

The Commonwealth of Australia presented our *Canberra* with a plaque, replica of the RAN *Canberra*'s badge. Made of Australian wood and surmounted with a Navy crown, the original plaque is mounted in the cruiser's wardroom; a bronze replica of the plaque is mounted on a bulkhead on *Canberra*'s starboard quarterdeck.

WATCH ON HIGH — Radar-packing *Super Constellation* of the North Atlantic Barrier heads out on patrol.

The Barrier Always

BARRIER men plot their course. *Below:* Snow adds to hazard of barrier duty.

Last year ALL HANDS readers had an extensive look at the over-all operation of the North Atlantic Barrier Flights—those airborne extensions of the DEW Line which, since 1956, have helped form a deterrent against surprise attack on the U. S. east coast.

Since 1956, Airborne Early Warning Squadron Eleven, operating out of Argentia, Newfoundland, as one of the three squadrons assigned to the North Atlantic Barrier, has flown the Argentia-Azores run. Late last summer, however, two new barriers were established. These new barriers present new problems, and new hazards, but to the crews who man the radar-packed WV-2 "Warning Star" *Super Constellations,* they're essentially the same. To them, they still mean long hours in the sky over the icy waters of the North Atlantic—and just plain hard work.

As we've pointed out before, no word-picture of the barrier flight story can be really complete. Preparation for each flight goes back far beyond the hours spent in pre-flighting the aircraft. It goes beyond, too, the days of progressive maintenance spent on each plane, and the weeks and months of intensive training required for all officers and men connected with the operation. For a part of that story, here is a portrayal of a 16-hour stretch in the barrier-hopping life of one of AEW-11's crews.

Crew Two is as typical as any of the many crews whose job it is to keep a constant vigil on the barrier. It calls itself the "Zulu-Zulus"—a nickname stemming from an improperly prepared message it once sent out. (Some of the other crews claim that the two "Z's" on Crew Two's Flight Patch represent the sleeping they do on the barrier. This is pure slander, however. Like all the crews, Crew Two knows its job. Those two "Z's" actually represent the spirit and esprit de corps which a crew flying together time after time can generate, and the common goal of constant readiness which unites them in their daily routine.)

Barriermen, as we've said before, put in a long working day. Several hours before launch time, the crew begins to prepare for the flight. The plane is gassed, then flight engineers give it a thorough pre-flight inspection. Technicians de-bug any electronic gear found faulty during the previous flight. The CIC crew prepares its charts and message forms, and picks up the flight rations. Two meals for each crew member are packed aboard the aircraft, which has a small refrigerator and a three-burner stove.

While the enlisted crew members are performing these tasks, the officers are preparing navigation charts, being briefed on the weather, and picking up confidential publications. They are briefed at the Operational Control Center concerning exercises on the barrier, transiting ships and aircraft, and communications conditions. Normally, the crew boards the aircraft and taxis out of the hangar for engine run-up about 20 minutes before scheduled launch time.

Stays Up

Weather plays a big part in barrier flights. Takeoffs must often be made in below-zero weather, and frequently strong crosswinds will make the huge *Connie* sway down the runway. The best altitude for maximum radar coverage often coincides with cloud-top levels, making flights a constant series of jolts and bounces. Eating and sleeping when off watch can be difficult—but the experienced barrierman, as does his shipboard counterpart far below on the turbulent ocean, learns to cope with all of this.

Barrier flights can, and do, vary from the sheer boredom of smooth weather flying and no contacts to the confusion of rough weather and heavy traffic. There are takeoffs under low ceilings and near-zero visibility, and landings under conditions which vary from extremely trying to just plain impossible. Through it all, most barriermen really earn their flight pay.

—R. S. Oakley, Jr., LTJG, USNR

WHO'S UP? — Navigators flip to see who will navigate first watch. *Below: Connie* gets an all-important maintenance check before flying a mission.

AWAY WE GO — Crew of barrier patrol plane receives pre-flight briefing.

'CANNED' MUSIC — Tenth Naval District Steel Band makes music with its pans and a penny whistle.

Pans Get Sweet and Hot

THE NAVY, like the rest of the armed services, has a reputation for stressing uniformity. Uniformity is important, of course, in its place. At the same time it is refreshing to come across an outfit that is about as un-uniform as it is possible to be, yet remain in the Navy. That organization is the Tenth Naval District Steel Band at San Juan, Puerto Rico.

Steel bands, for the benefit of those who are not old Caribbean hands, came into being after World War II, when there was an abundance of empty 50-gallon oil drums in the West Indies and a surplus of native sons who had nothing better to do than find out what could be done with them.

After some experimentation, the tinkerers found they could produce a musical instrument by grooving out areas in the head of an oil drum with hammer and cold chisel. Heating the "pan" over a bonfire and adjusting the tension of the grooved areas enabled them to produce a desired musical note by striking the drum's head with a mallet.

Making a tuneful steel drum is not an easy trick. It requires a good ear and a steady hand to produce the right concavity, the right tension and a cut-off at the right point to produce the right pitch.

The early steel bands, native style, were used principally to provide local color for tourists visiting Trinidad, Barbados, Antigua, St. Croix and St. Kitts.

In 1957, however, Rear Admiral Daniel V. Gallery, then Commandant of the Tenth Naval District, visited Trinidad and was so intrigued with the music of the steel bands that he bought a full set of "pans" and converted the Tenth Naval District Band into a steel band.

Until Admiral Gallery retired the band was known unofficially as Admiral Dan's Pandemoniacs. Although the name was an attention-getter, it didn't do much to describe the sounds which the band now produces.

Far from the noise and disorder suggested by the name, the band's music is more suggestive of blue Caribbean water washing against a beach fringed with palm trees and caressed by the trade winds.

For a while, after the musicians had all but abandoned their more conventional instruments for sawed-off oil drums, the band existed on a strict diet of calypsos and merengués imitating the style of the West Indian steel bands.

While this might have been sufficient for untrained muscians, it didn't satisfy the men of the Tenth Naval District.

They began to improve their instruments until they gained a range of five-and-one-half chromatic octaves.

The bass instruments were extended, filling out their range so that intricate and musical bass lines could be written into the score which, incidentally, looks more like a sheet of piano music than anything else.

As a result of the bandsmen's inventiveness, the band was pulled out of the usual steel band "three chords/two keys" category.

POPULAR Steel Band was started by RADM D.V. Gallery, USN (Ret.) in '57.

Chief Franz E. Grissom, the band's leader, has composed several numbers for steel bands and arranged others to include piano, bass fiddle and instruments found in Latin bands, such as maracas and bongo drums.

He also wrote a song which features the "penny whistle" as a solo instrument. The penny whistle is a piccolo-like instrument made, oddly enough, by a one-man factory in Maryland and sold all over the Caribbean area, not for a penny but for about fifty cents.

The press kit which the band sends out in advance of its appearances to indoctrinate its hosts in its needs and capabilities, reveals some illuminating facts about the organization. For instance:

- Close audience contact is desirable, and appearances in large open areas such as stadiums are taboo.
- TV and radio are among the best mediums for hearing the steel band.
- Outdoor performances are OK if there is no rain or direct sunlight to get the instruments out of tune.
- The steel band is usable on floats in parades but the instruments are not marchable.
- The steel band consists of 15 members and an officer-in-charge, who are transported by Navy aircraft.
- The steel band has 20 50-gallon oil drums for instruments. A two-ton truck is necessary to move the instruments and a locked room is necessary to store them.

The kit doesn't say anything about providing a hammer and a small electronic instrument, both of which are necessary to tune the "pans."

Since the Tenth Naval District Steel Band is a Navy band, it devotes most of its time to Navy activities. However, it also has an impressive list of references outside the Navy, too.

They include radio and television appearances on some of the best-known shows on the networks, appearances at the New Orleans Mardi Gras, the Chicago Music Festival, the Brussels World's Fair and so many other places and occasions that space doesn't permit a listing.

Suffice it to say that last year the band members traveled over seventy thousand miles to give more than 240 performances and bring the steel band sound to the ears of everyone from street dancers to royalty, former President Eisenhower and Pablo Casals.

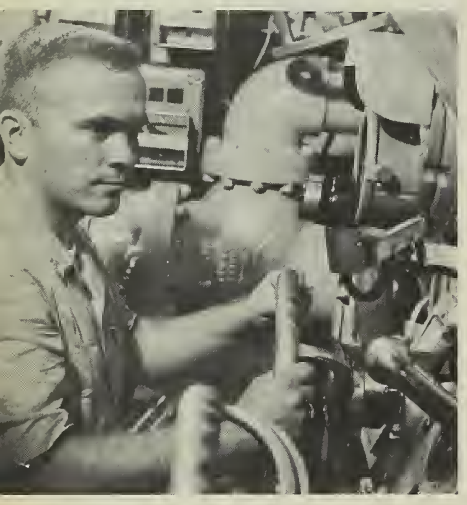
Their music is heard on movie sound tracks and several record albums. Their latest album is "New Paths for Steel Band," the cover of which pictures Chief Grissom and his band members trekking with their instruments through the El Yunque rain forest near San Juan.

When the occasion demands, the band members still break out their trombones and trumpets; set their hats squarely on their heads and make like a military band, but everyone suspects that beneath the military bearing their souls wear straw hats and sit under palms by a Caribbean beach.

— Robert Neil

FULL HOUSE — Tenth ND Steel Band concert draws large crowd at Bogota, Colombia, during Latin American tour. *Below:* Experts shape oil drums.

ON THE BEACH — The band devotes most of its time to naval functions but has an impressive list of appearances in other types of events.



Here Are Best

THE U. S. NAVY's Battle Efficiency "E's" for fiscal 1962 have been awarded to ships that have proven through competition at sea to be the most battle-ready in their Fleets.

This readiness is evaluated each fiscal year in competitive exercises by ships of every type in every phase of operation and administration.

The white "E" means that every

NAVY AIR FORCE, ATLANTIC

Intrepid (CVS 11)
Lake Champlain (CVS 39)
Duxbury Bay (AVP 38)

CRUISER-DESTROYER FORCE, ATLANTIC

Newport News (CA 148)
John R. Pierce (DD 753)
Manley (DD 940)
Vesole (DDR 878)
Turner (DDR 834)
Moale (DD 693)
Davis (DD 937)
Stribling (DD 867)
Laws (DD 558)
John W. Weeks (DD 701)
Steinaker (DDR 863)
Lowry (DD 770)
Claud Jones (DE 1033)
Courtney (DE 1021)
Taussig (DD 746)
Camp (DER 251)
Huse (DE 145)
Yosemite (AD 19)
Grand Canyon (AD 28)
Yellowstone (AD 27)
Charles S. Sperry (DD 697)

MINE FORCE, ATLANTIC

Meadowlark (MSC 196)
Dash (MSO 428)
Adroit (MSO 509)
Exploit (MSO 440)
Nimble (MSO 459)
Aggressive (MSO 422)
MSB 29

AMPHIBIOUS FORCE, ATLANTIC

Traverse County (LST 1160)
Grant County (LST 1174)
Middlesex County (LST 983)
Fremont (APA 44)
Shadwell (LSD 15)
Donner (LSD 20)
Hermitage (LSD 34)
LCU 1487

SERVICE FORCE, ATLANTIC

Suribachi (AE 21)
Rigel (AF 58)
Antares (AKS 33)
Nantahala (AO 60)
Canisteo (AO 99)
Truckee (AO 147)
Mattabesset (AOG 52)
Amphion (AR 13)
Windlass (ARSD 4)
Kiowa (ATF 72)
Shakori (ATF 162)
Weatherford (EPC 618)
Neptune (ARC 2)
San Pablo (AGS 30)

SUBMARINE FORCE, ATLANTIC

Bushnell (AS 15)
Toro (AGSS 422)
Piper (SS 409)
Dace (SSN 607)

# of the Fleets

member of the ship's company has had a hand in helping his ship win, because every department aboard his ship has been evaluated. Therefore, each crew member is entitled to wear the white "E" on his uniform for the following fiscal year. It is a distinction to be proud of and every man has worked hard to earn it.

Here are the winners.

Entemedor (SS 340)
Cutlass (SS 478)
Picuda (SS 382)
Amberjack (SS 522)
Sirago (SS 485)
Penguin (ASR 12)
Clagamore (SS 343)
Sablefish (SS 303)
Nautilus (SSN 571)
Grenadier (SS 525)
Tullibee (SSN 597)
Shark (SSN 591)

CRUISER-DESTROYER FORCE, PACIFIC

Providence (CLG 6)
Rupertus (DD 851)
Rogers (DDR 876)
Chevalier (DD 805)
DeHaven (DD 727)
John A. Bole (DD 755)
Coontz (DLG 9)
Carpenter (DD 825)
Bridget (DE 1024)
Finch (DER 328)
Dixie (AD 14)
Bryce Canyon (AD 36)

MINE FORCE, PACIFIC

Vireo (MSC 205)
Prime (MSO 466)
Pivot (MSO 463)
MSL 19
MSL 26
MSB 16

AMPHIBIOUS FORCE, PACIFIC

Paul Revere (APA 248)
Terrell County (LST 1157)
Jerome County (LST 848)
Floyd County (LST 762)
Thomaston (LSD 28)
Alamo (LSD 33)
Carter Hall (LSD 3)

SERVICE FORCE, PACIFIC

Rainier (AE 5)
Sirius (AF 60)
Guadalupe (AO 32)
Ponchatoula (AO 148)
Targeteer (YV 3)
Jason (AR 8)
Cree (ATF 84)
Arikara (ATF 98)
Maury (AGS 16)
Bolster (ARS 38)

SUBMARINE FORCE, PACIFIC

Salmon (SS 573)
Halibut (SSGN 587)
Cusk (SS 348)
Sargo (SSN 583)
Sterlet (SS 392)
Greenfish (SS 351)
Bugara (SS 331)
Menhaden (SS 377)
Blueback (SS 581)
Capitaine (AGSS 336)
Scamp (SSN 588)
Coucal (ASR 8)

VE Can Mean

A CHIEF BOATSWAIN'S MATE serving in a Pacific Fleet aircraft carrier took a long second look at a piece of shipboard hardware a few years back, and was struck with an idea. Then, instead of just forgetting about it, he took his idea to his division officer.

This CPO's action resulted in the saving of approximately $15,000 aboard this particular carrier—plus the elimination of what had been a vexing Fleet maintenance problem. Furthermore, while he probably didn't realize it at the time, he found the solution by applying the principles of value engineering.

Value engineering may strike you as just another of those fifty-cent phrases the Navy is fond of using in its official language. It isn't.

Reduced to its simplest terms, it's a determined effort, from shipyard designing table right on up, to get more value for every Navy dollar. It's a program which can pay off handsomely—and one in which all of us are more than welcome to participate.

The technique of value engineering begins by asking five basic questions: What is the item? What does it do? What does it cost? What else might do the same job as well or better? And, what will *that* cost?

The case in point aboard the aircraft carrier was a common, garden-variety hatch guard—a piece of equipment more than a little familiar to most of us. You've probably passed similar ones hundreds of times without giving them more than a passing glance.

LET'S LOOK MORE closely at the chief's line of reasoning about the guards and see how it follows the value engineering technique.

What was the item? A hatch guard. What did it do? It prevented crewmen from falling down an open hatchway. How much did it cost? Well, it was when he posed this question that the chief hit pay dirt, for the hatch guards aboard this carrier were elaborate contrivances indeed. They were composed of three-eighths-inch wire rope, with stainless steel fittings attached to each end. The wire rope was painted for preservation, covered with muslin, and served with marline. Another wrapping of muslin was applied; this in turn was covered with canvas, and the ends of the canvas were served with copper wires and tinned. The cost, for all of this? A whopping $48 per hatch guard.

And what else could do the job? Why not, reasoned the chief, a length of chain to serve the same purpose? Further investigation revealed that chain would, indeed, do the job as well—and that the cost of quarter-inch chain of the required length would be only $4 per hatch. And in addition, the simple length of chain would require much less frequent, and costly, maintenance.

This helps point out that saving

Victory in Time of Peace

money—call it value engineering or whatever you wish—can and should be an all hands endeavor, and not confined to ship designers and engineers.

It is true that the program achieves its broadest scope and effects the largest savings in shipyards, but the Navy can use your help in this effort too.

THE WHY OF value engineering is simple—the Navy wants to reduce the cost of its ships. During the past couple of decades, shipbuilding costs have skyrocketed. The Bureau of Ships says the cost of building a destroyer now is close to six times as much as it was two decades ago, and a nuclear-propelled ship costs almost 10 times as much as its conventional counterpart did twenty years ago. Therefore, it's up to all of us to help find less expensive ways of obtaining the same results in our shipboard equipment.

Navy value engineering got its start back in 1954, when the Bureau of Ships organized a value engineering branch as the first government effort in this field.

The Chief of the Bureau of Ships sent a team to investigate new ways of reducing the cost of our ships. When the team reported that there was much work being done on similar problems by various industrial firms, an office, reporting directly to the Chief, was established.

Its mission was to investigate and develop an effective cost reduction program, employing some of the same techniques that industry had been using.

The team made further visits to manufacturers of marine engineering equipment and machinery, diesel engines, air-conditioning and refrigerating machinery, and electronics equipment.

When the information gained during the visits was digested, a pattern for operation began to emerge. First, to identify this cost reduction program, it was named "Value Engineering." Why? Because this name represents the primary object of the program; that is, to get the most value for the money in the products that are engineered in or for the Navy.

Several months after the value engineering unit was established, more engineers were added to speed up the program. Then, it was decided to set up value engineering units in two naval shipyards to see what could be done from the field. The units, each consisting of three to six design engineers and production personnel, were sent to Puget Sound Naval Shipyard and New York Naval Shipyard. These first field teams worked so well that all naval shipyards now have them.

VALUE ENGINEERING may be expressed as the taking of a hard look at a new or workable design to retain its function, quality and reliability at a lower cost. It is *not* the process of building or obtaining a cheaper end product at the expense of quality and reliability.

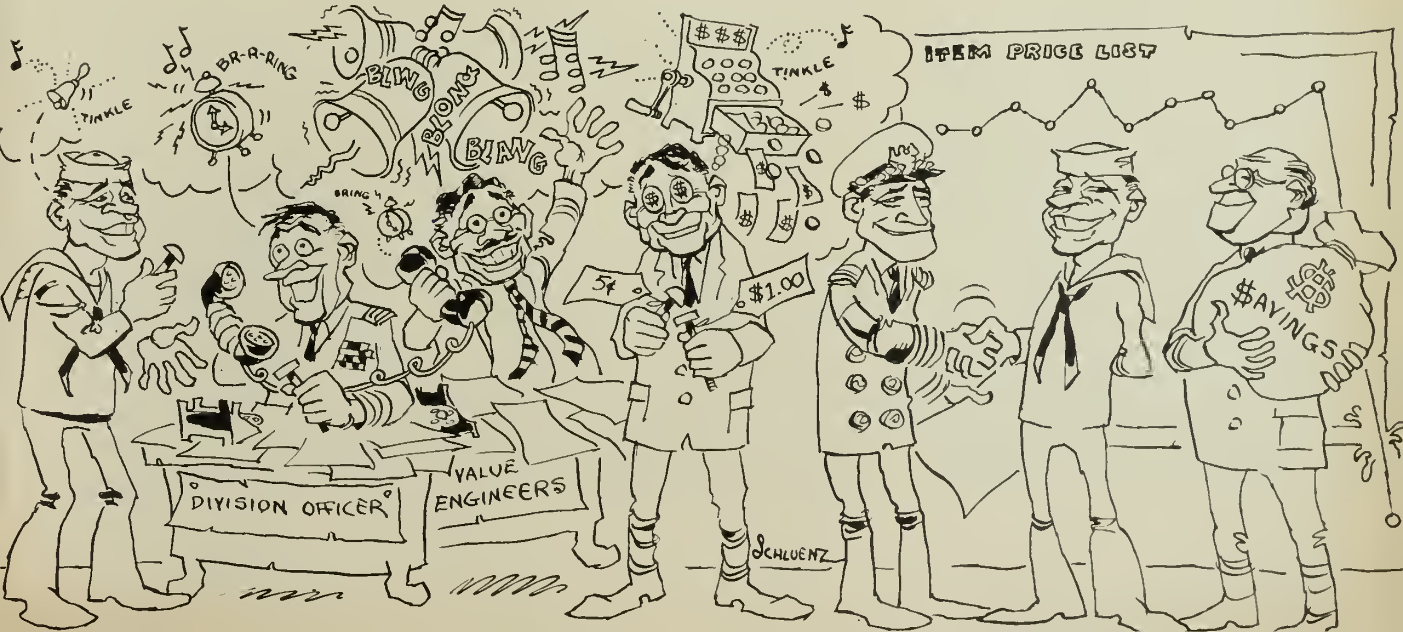
For example, a cap screw used to secure the cover panels on a radar repeater cost $2.11 when purchased from the manufacturer. After investigation, value engineers found that the cap screws cost this much because the knurled head was five-thirty-seconds of an inch longer than that on a standard cap screw that cost three cents and worked just as well. The three-cent screw was then substituted.

When a Naval designer starts to work on a project, he is faced with three basic considerations—(1) reliability, (2) practicability of manufacture, and (3) time.

His most important requirement is reliability—the item must work under the rigid, adverse conditions found at sea. As a result, a very reliable, but sometimes costly item is produced.

The cap screws for the cover panels on the radar repeaters are examples of how much money can be saved when an item can be manufactured from a standard assembly line. Thus, practicability of manufacture is also important to the designer.

Of course, time is always important. A designer usually is faced with a deadline for producing an acceptable plan for an item. Occasionally the day-to-day pressures of meeting deadlines force attention to the re-



liability of the gear and how soon it can be produced, rather than on how much it will cost.

VALUE ENGINEERS are always at work on these problems. For instance, the Navy has built many wooden-hulled minesweepers to rid coastal waters of magnetic mines. As far as is practical, their equipment is nonmagnetic. The diesel engines in these sweepers have nonmagnetic aluminum blocks. A neoprene-coated, stainless steel clamp is used to attach fuel and air lines to the engines. One minesweeper needed clamps to replace those that had been lost or damaged while the engine was being repaired. When the shipyard made the necessary purchase from the engine manufacturer, the clamps were found to be made of a magnetic form of stainless steel. Time was very important, so the shipyard asked the local value engineering team to come up with a solution.

When the value engineers checked out the price of the stainless steel clamps, they found, to their amazement, that the clamps were costing $2.70 apiece. After considerable search, they came up with a clamp used in aircraft engines for a similar purpose. It was strong enough to withstand engine vibration, and its neoprene coating was resistant to oil and gasoline. It was completely nonmagnetic. It cost nine cents. As might be expected, this clamp was used. Besides being less expensive, it was more reliable, already in mass production, and available quickly.

BUT A VALUE engineering team can't live and work aboard a ship and doesn't get the chance to take a long look at some of the shipboard equipment used regularly by crew members.

This is the phase of value engineering that can apply to you and almost every sailor in the Fleet.

Daily use of a certain piece of equipment may bring ideas of a better design or of substitution of something that costs less, but does the same job. That's what the chief did.

Here is what you can do when you have an idea about improving a piece of shipboard hardware. To help you answer the five basic questions, first get the facts—know the cost of the item. If this can't be checked, and frequently it can't aboard ship, ask yourself how much it costs to *maintain* this piece of gear. Is it a continuing maintenance problem? Is the equipment casualty rate high? What can be done to simplify the item and reduce maintenance costs and time?

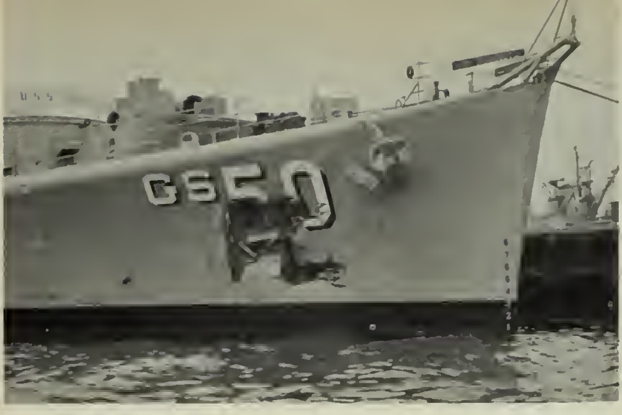
Determine the function. If it has more than one, figure out which is the most important, and which is secondary.

Then, decide whether or not the item is over-designed for its use. Is there a common commercial item available that will perform the same function?

When you come up with an idea, let your division officer know. Value engineering teams in every naval shipyard are always ready to accept suggestions from the Fleet, if they come through the chain of command.

If you have an idea that's approved, you may see the results of your value engineering project aboard your ship.

—Jim Lewis, JO2, USN.



She's Seaworthy Again

The repair ship uss *Klondike* (AR 22) made quick work of a tough job when the bow of uss *Rehoboth* (AGS 50) was damaged during an accident in San Diego harbor earlier this year.

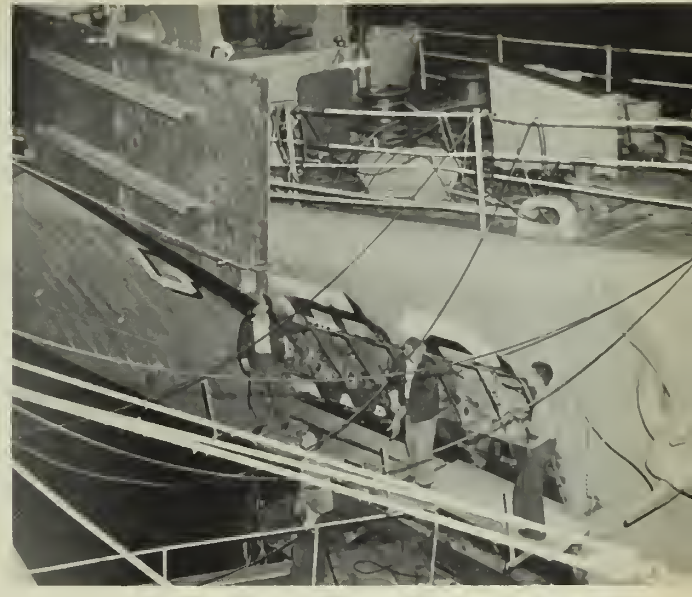
Two hours after the accident *Klondike* repairmen were hard at work on board the damaged ship. Divers checked the hull while shipfitters, pipefitters, welders, electricians and other specialists prepared lists of materials and equipment needed to do the job.

When told *Rehoboth* had urgent operational commitments and would have to be completed within 10 days, the *Klondike* repairmen winced, then went to work around the clock.

First, the twisted and torn metal had to be cut out, damaged equipment removed, severed cables pulled and debris cleared away. Next, new frames were forged, shaped and welded into place. Warped decks and stiffeners were straightened and replaced. Heavy shell plates were cut and formed to the curvature of the hull, then lowered into place and welded.

Seven days after the accident *Rehoboth* was seaworthy. At this point, *Klondike* painters moved in to put on the finishing touches. Three days later a special cable that had been ordered from the Philippines arrived and was installed.

By the time the dust was settled *Rehoboth* was underway to meet her operational commitments. On schedule.



TEAM WORK — Men of *USS Klondike* (AR 22) install shell plates and *(below)* weld new frames into place.

READY TO GO — Damage to *Rehoboth* was repaired in record time. *Rt:* Painter adds the finishing touches.

What's Coming for FY 63?

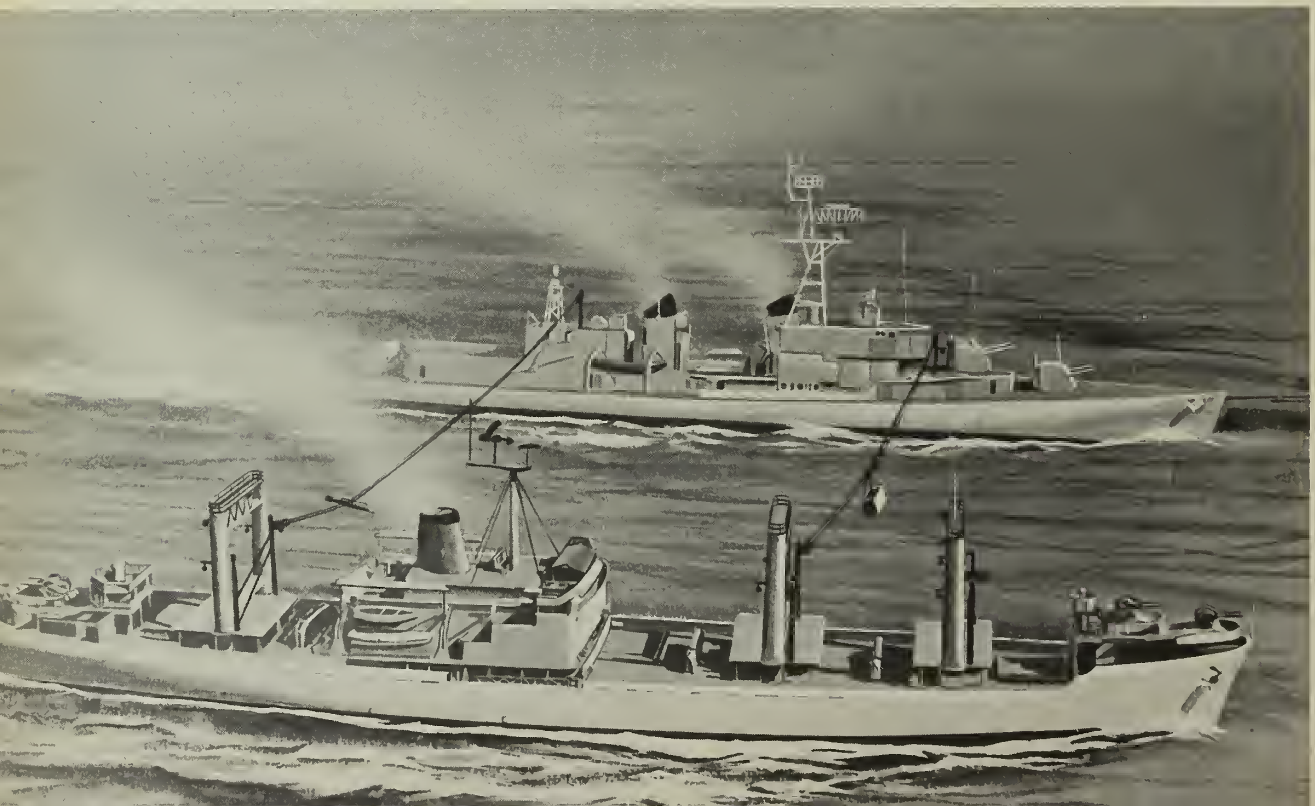
The construction of 37 new ships and 45 service and landing craft, ranging from a *Forrestal*-class CVA to covered lighters, has been authorized under the fiscal year 1963 shipbuilding program. The modernization or conversion of 35 existing ships and one floating drydock has also been approved.

Here's a preview of ships to come:

New Construction

- **One CVA**—This conventionally powered attack aircraft carrier will be approximately the same size as those of the *Forrestal* class, but will have improved electronics and communications equipment. The ship will be equipped with a high capacity communications system (HICAPCOM), the Navy Tactical Data System (NTDS), and an automatic aircraft landing system.
- **Six SSBNs**—The nuclear-powered Fleet ballistic missile submarines will each be armed with 16 *Polaris* missiles that can be fired while submerged. Navigation devices in the new subs will insure accurate positioning before the missiles are fired. In addition, the SSBNs will be equipped with standard torpedoes for action against enemy subs or surface ships.
- **Eight SSNs**—These nuclear-powered attack submarines will be essentially the same as *Thresher*-class subs authorized in previous years, but will embody many improvements. They'll be antisubmarine warfare ships designed primarily to destroy other submarines, but they will also be effective against surface ships. The SSN's ASW capability will be bolstered by long-range sonar and guided- and rocket-assisted torpedoes.
- **One DLGN**—The nuclear-powered guided missile frigate will come equipped with the still experimental long- and medium-range *Typhon* surface-to-air, surface-to-surface and surface-to-missile system. She will operate offensively with carrier strike, ASW and amphibious forces. In the *Typhon* system, a single multipurpose radar will perform all functions formerly assigned to separate search, acquisition, tracking and guidance radars.
- **Four LPDs**—Two of these amphibious transport dock ships are already under construction. All will be vital units in the Amphibious Strike Force. The new ships will carry both landing craft and transport helicopters along with combat troops and their equipment.
- **One LPH**—The amphibious assault ship is another important part of the Amphibious Strike Force. Designed to operate in conjunction with the amphibious transport dock, the LPH will transport troops and their equipment, then land them by helicopter during the vertical envelopment phase of an amphibious assault.
- **Five DEs**—The escort ships authorized this year are specially designed for locating and destroying enemy subs. They are essentially repeats of those in the 1962 program. They will combine improved seakeeping ability with advanced antisubmarine warfare capabilities, including long-range sonar, an antisubmarine rocket launcher, antisubmarine torpedoes, drone ASW helicopters and conventional 5-inch guns.
- **Three DEGs**—These ships have the same hull, machinery plant and ASW armament as the DEs. In addition to antisubmarine warfare capability, the new guided missile escort ships will be equipped also with the *Tartar* missile system for operations against enemy aircraft.
- **Two PGMs**—Authorized for construction as prototypes, the motor

'FAST' SHIP — Two post-WW II ammunition ships will be modernized for rapid handling of guided missiles.



gunboats will operate offensively on patrol, blockade and surveillance missions in coastal areas. Their size, speed, endurance, seakeeping qualities and firepower will enable them to perform many tasks in naval operations in waters other than high seas.

● **Two AGORs**—The oceanographic research ships will be floating laboratories manned and operated by civilians. Studies will concentrate on collection of oceanographic and acoustic data for application in naval warfare—particularly in antisubmarine warfare and in support of the national oceanographic research program. The ships will be 209 feet in length.

● **One AGS**—This surveying ship—the first of its type to be built by the Navy—will conduct hydrographic surveys and collect special oceanographic, acoustic and meteorological data. It will be manned by civilians, but will be operated under the technical direction of the Oceanographer of the Navy. The AGS will generally follow construction lines of the AGOR. Her oceanographic research spaces, however, will be adapted for hydrographic survey operations.

● **One AOE**—The recent design of fast combat support ships will mean a radical innovation in underway replenishment to the Fleet. The AOE will be able to transfer ammunition and stores at sea. Vertical replenishment will be performed by two cargo helicopters carried on board. The speed of this ship is such that it can travel as an integral part of the fast striking forces.

● **One AC (FBM)**—This will be the third new construction submarine tender which can provide full mobile base facilities and support for nuclear-powered submarines, including *Polaris* submarines. Two others were authorized in the 1960 and 1962 programs. This ship will have the capability and facilities for the handling, replacement and limited servicing of *Polaris* missiles. She will be able to support nine SSBNs, with as many as three receiving complete alongside service at the same time.

● **One MSTS (RO/RO) Cargo Ship**—The roll on—roll off, cargo ship for the Military Sea Transportation Service is being specially constructed for the rapid handling of wheeled and tracked vehicles. The ship's interior will be fitted with a system of vehicle ramps from the upper 'tween deck to the weather deck and decks below. A stern ramp will lead to the upper 'tween deck level for easy access from and to dockside, lighters and such; thus the designation roll on—roll off. This ship is an improvement of the highly successful *Comet* now in regular service in support of U. S. forces in Europe.

GROWING GROUP—New construction calls for six more *Polaris* submarines.

● **Service and Landing Craft**—Also authorized for new construction under the FY '63 shipbuilding budget are seven harbor tugs (YTB); nine covered lighters (YFN); three repair, berthing and messing barges (YRBM); 21 landing craft, personnel, large (LCPL); four landing craft, swimmer reconnaissance (LCSR); and one landing craft, utility (LCU).

Conversions

A number of existing ships will be given a new look under conversion programs authorized with fiscal 1963 money. Here's a roundup:

● **Twenty-four DDs**—These ships, all *Gearing* class destroyers, are scheduled for remodeling as a continuation of the Fleet Rehabilitation and Modernization (FRAM) program commenced in fiscal 1960. The ships are now 16 to 17 years of age. Their conversion will include complete overhaul, replacement of excessively worn machinery components, repairs to hulls and additions of the latest equipment, including ASW gear, that can be effectively installed. It is expected that eight more years

FISH OUT OF WATER — Conversion of an ARD 12 class floating drydock will equip it to take care of *Polaris* submarines at their deployment sites.

SPEEDSTER — Two prototype motor gunboats are authorized for construction. These fast boats will operate offensively in coastal waters.

will be added to the useful life span of these ships.

• **One MCS**—The first conversion of an LSV (landing ship, vehicle) to MCS (mine countermeasures support ship) will bring into service a ship that can transport, maintain, operate and support 20 minesweeping launches and two helicopter minesweepers. The finished product will be used mainly in support of amphibious landing operations in forward areas.

• **One CC**—The conversion of an old CVL to command ship status will produce a ship equipped to serve as a mobile command post for top echelon commands. The CC will have facilities for world-wide communications and the rapid processing and display of command data. In the conversion process, a portion of the carrier's hangar deck will be made into special command spaces and fitted with extensive electronics equipment. The major portion of the flight deck, except for space necessary for helicopter operations, will be used for the complex communications antenna arrays.

• **Two AEs (Fast)**—Two of today's post-WW II ammunition ships will be modernized for the rapid handling and transfer of missiles. Three holds will be rigged for missile stowage, and a fast automatic shuttle transfer (FAST) system will be installed. Completely mechanized facilities for moving missiles from stowage to transfer stations will mean safer missile handling and reduce transfer time.

• **One AGMR**—The major communications relay ship will be the result of conversion of an old CVE hull. The AGMR will have special antenna systems for mobile communications with operating forces. She will be used with present shore communications services, as a substitute for essential communications facilities that may be lost and as a temporary extension of communications into areas of special operation. The ship was approved for conversion last year, but was delayed to make funds available for other shipbuilding projects.

• **Two AGTRs**—The conversion of two *Victory* ships to technical research ship status will bring into service two mobile bases that specialize in communications and electromagnetic radiation research.

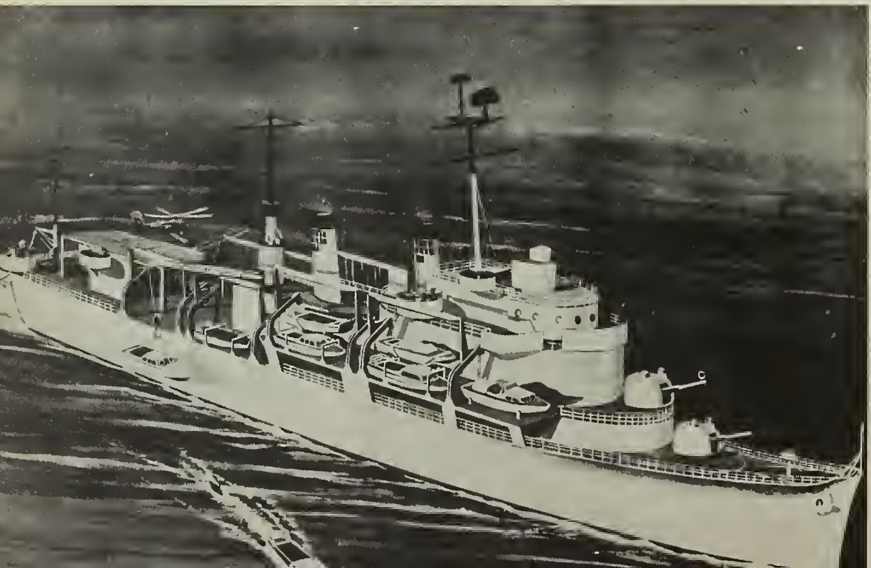
• **Two AOs (Jumbo)**—The conversion of two Fleet oilers into jumbo oilers is an extension of the FRAM concept, under which the life of old ships is extended through rehabilitation and modernization. The project will involve "jumboizing" hulls through insertion of a new tank section which will increase the over-all length by approximately 90 feet, thereby increasing petroleum cargo capacity from 100,000 to 150,000 barrels. Replacement and renovation of pumps and deck gear will increase their petroleum transfer rate.

• **One AK (FBM)**—This will be the first conversion of a cargo ship to Fleet ballistic missile status. The AK (FBM) will be able to resupply completely deployed FBM submarine tenders with *Polaris* missiles and other submarine weapons. The remodeled AK will also supply frozen and dry food provisions, general cargo, technical spare parts, packaged petroleum products, bottled gas and bulk and diesel fuel. No armament is planned for the ship. She will operate as an independent unit with a civilian (MSTS) crew and a Navy unit embarked.

• **One AVM** — *Norton Sound* (AVM 1), a guided missile ship, will be reconfigured for the test and evaluation of the Navy's latest weapons system. Conversion calls for installation of a *Typhon* weapons system prior to its installation as an operational system in a combatant ship. *Norton Sound* has served as a seagoing test platform for various other missile systems during the past 12 years.

• **One ARD**—A conversion of a floating drydock will provide a *Polaris* deployment site with facilities for drydocking and limited repairs. The drydock's capacity will be more than doubled.

BIG SWEEP — Converted LSV will become mine countermeasures support ship which transports and supports 20 sweeping launches and two copters.



This Bell Has Cheerful Ring

At the back of every submariner's mind is the ever-present prospect of becoming "downed"—in other words, of his ship being unable to surface after a dive.

It's a comforting thought to all of them, however, that should such a disaster overtake them, there is usually a submarine rescue ship not too far away—and that the doughty ASRs and their crews are trained and ready to lend a helping hand.

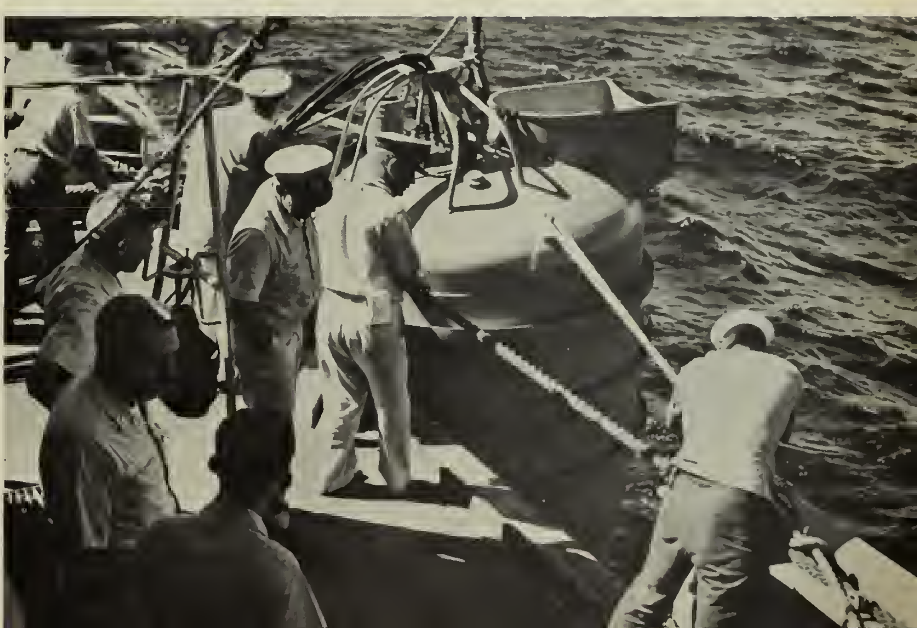
USS *Queenfish* (SS 393) is one Pacific Fleet submarine which knows this for sure, after a recent surprise rescue training exercise staged near Pearl Harbor.

Queenfish, en route to Pearl for routine training operations, was instructed to settle to the bottom of the ocean off the coast of the island of Maui. Then USS *Coucal* (ASR 8), which was conducting independent training exercises some 25 miles away, was alerted and directed to speed to the last known position of the—as far as they knew—overdue and downed submarine.

Pumps, air compressors, lifting booms, anchors and mooring gear were all readied for the forthcoming operation. *Coucal's* diving bell, capable of withstanding tremendous underwater pressures, was checked and rechecked. In less than three hours after being alerted, *Coucal* was positioned over *Queenfish*, and had commenced diving operations.

It was just before the diving bell was sent down for the first time that *Coucal* learned this was just a test. Then, after one test run with her bell, she cleared the area so *Queenfish* could surface and resume course for Pearl Harbor. Her speedy and well-organized reaction to a supposed distress call, however, is making *Queenfish* crewmen breathe easier.

Photos show diving bell being positioned over downed submarine and suited divers on platform ready to be lowered over the side.



TO SEA — MSTS cargo ship USNS *Pvt. Frank J. Petrarca* loads up. *Rt:* USNS *Range Tracker* cruises Pacific.

It's Service to the

It would be difficult indeed, if not impossible, for any Navyman not to be affected at one time or another by the Military Sea Transportation Service.

He comes in contact with one part of this far-flung organization when he ships to an overseas shore station. During this time, he's with MSTS for days or perhaps weeks—as long as he is on board the MSTS ship.

If, by chance, he goes to his new post via some other means of transportation, his dependents may use MSTS. Almost inevitably, his household effects and car will arrive by MSTS ship or MSTS-chartered ship.

If our Navyman is stationed on board a ship, the oil that provides its motive power may have, at one time or another, been transported by an MSTS ship. The same is true of much of his food.

In several places on this not-so-green earth, MSTS means the difference between surviving and not surviving. MSTS, for instance, supplies the men at Antarctica and those who man the DEW Line.

MSTS ships supply points where a commercial ship would not call because of risks for which there is no insurance coverage or where insurance, if available, would be prohibitively expensive.

There are also places in the MSTS world that a commercial ship would have very little, if any, reason for visiting, but to which the long arm of military preparedness reaches.

The idea of making the Navy responsible for providing all ocean-borne transportation for the armed forces is an old one. It wasn't until 1949, however, that the idea was adopted.

To put it briefly, MSTS exists for the following reasons:

- To provide sea transportation for personnel and cargo of the Department of Defense (excluding, of course, personnel and cargo transported by units of the Fleet).
- To plan and negotiate for the use of commercial shipping to augment the MSTS nucleus fleet whenever necessary.
- To provide support ships for scientific programs.
- To be ready for expansion in time of war.

MSTS is classed as a fleet and is under the command of a vice admiral. As with other Fleets, MSTS is a component of the Navy's operating forces.

The initials "USNS" which precede an MSTS ship's name go a long way toward explaining the idea of MSTS. "USNS," of course, stands for United States Naval Ship. The approximately 110 ships designated "USNS" are all in the MSTS Fleet. They are manned by officers and crewmen who are members of the Civil Service. All MSTS ships' officers hold Coast Guard licenses.

There are 20 MSTS tankers under the over-all direction of COMSTS.

In addition to USNS ships, there are three commissioned ships in the MSTS Fleet. USS *Mann* (T-AP 112), USS *Mitchell* (T-AP 114) and USS *Breckenridge* (T-AP 176).

Each transport is under the command of a Navy four-striper and has a Navy crew of about 350 men.

Incidentally, these three transports don't have a monopoly on MSTS billets for Navymen. The 12 USNS transports each have a military department under its own CO and XO.

These officers are responsible for the discipline of the ship's military passengers. Most of the men pulling duty on board these 12 ships are in the yeoman, hospital corpsman, electrician's mate and ship's serviceman ratings.

Several MSTS ships engaged in oceanographic survey and missile-tracking work also have military departments where the electronics and communications ratings are in demand.

In addition, numerous shoreside billets exist in its area command offices located in Brooklyn, N. Y.; San Francisco, Calif; London, England; and Yokohama, Japan.

Some shoreside billets are also available at MSTS offices in Washington, D. C., and at 20 overseas ports scattered around the world from Casablanca to Anchorage.

The first international crisis into which MSTS was thrown was

'BIRD' watching is this ship's job.

Services

that generated when North Korean troops ventured south of the 38th parallel and President Truman dispatched troops to stop them.

When the first North Korean stepped across the fateful line, MSTS was less than a year old and was still in the process of organization. Only MSTS ships necessary to fulfill normal requirements were readily available. All the rest were laid up in the Reserve Fleet.

The job to be done was staggering. Millions of troops had to be transported with enough food to supply them and enough petroleum products to run their vehicles.

To do it, MSTS teamed up with the National Shipping Authority and the commercial shipping industry and took drastic steps to put ships on the line for operation.

For instance, three commissioned troopships and 12 cargo ships were broken out of the Navy Reserve Fleet and others were taken out of the National Defense Reserve Fleet until a total of 308 ships had been taken out of mothballs and assigned to ship repair yards for activation.

By the end of the conflict, these ships had sealifted nearly five million troops and passengers and more than 22 million tons of petroleum products to the Far East. This amounted to more than 85 per cent of the fighting forces and equipment used. All this was in addition to MSTS' normal day-to-day commitments in other parts of the world.

MSTS TRANSPORT *USNS General Sultan* loads passengers at Naha, Okinawa.

MSTS was on hand to supply the landings at Inchon, Iwon and Wonsan. One hundred and ninety MSTS ships were at Hungnam to evacuate 105,000 military men, 91,000 Korean civilians, 17,000 vehicles and 350,000 tons of supplies to UN-held territory.

KOREA WAS ONLY the kickoff crisis in a crisis-ridden era. MSTS ships assisted in the sealift of 300,000 Vietnamese who chose to flee with only the meager belongings they could carry, rather than live under communism.

MSTS ships brought to the United States thousands of Hungarian refugees who feared Red reprisals for their part in the abortive Hungarian uprising of 1956.

MSTS ships transported troops and supplies to strengthen the United States' hand during the Berlin crisis and provided transport for the troops of many nations during the UN operations in the Congo.

One of the jobs of which MSTS is particularly proud is its support of posts in the Arctic. In this connection, MSTS has sealifted more than five million tons of cargo to the Far North since 1950, in spite of some formidable obstacles.

BETWEEN 1955 and 1957, MSTS ships carried material to be used in the construction of the Distant Early Warning (DEW) Line radar system which stretches along the fringe of the Arctic Circle across the entire North American continent. This, in spite of some of the worst ice conditions ever recorded in the Arctic.

To be more specific, MSTS sealifted more than one million tons of cargo and building equipment, in addition to a million barrels of petroleum products, to DEW Line sites.

More than 50,000 tons of building material also went to the Air Force's

FINE FOOD — Passengers enjoy their meal while traveling via MSTS.

LONG HAUL — MSTS ship delivers the goods to men in the Antarctic.

Ballistic Missile Early Warning System (BMEWS) at Thule, Greenland.

Perhaps none of this would have been possible without the experience which MSTS had already picked up during earlier supply operations in the Labrador-Greenland areas.

In 1957, an MSTS task group searched for and found a new Northwest Passage. However, MSTS was not so much interested in a northern water route to the Far East as it was in developing a deep-water passage across the top of North America to be used as a possible escape route for ships threatened by an ice blockage across their usual exits from the Arctic.

The route was by way of Bellot Strait and its approaches from the west—then on through Rae, James Ross and Franklin Straits. The shallowest point in the entire route was 36 feet.

The route is clear during the summer months and can be traversed with the help of icebreakers during the winter.

THIS YEAR, MSTS marked its 12th consecutive year conducting "Sealift for Security" operations in and around our far northern radar and defense installations.

Greenland, Labrador, Newfoundland and the Baffin and Ellesmere Island areas were visited by units of Task Force Six in operations which brought some MSTS ships within a few degrees of latitude of the North Pole.

This year, the first two ships to venture into the Arctic were USNS *Alatna* (T-AOG 81), a heavily plated tanker built by MSTS with an icebreaker bow, and the Navy icebreaker, USS *Burton Island* (AGB-1). The two ships carried petroleum into Sondrestrom, Greenland.

USNS *Redbud* (T-AKL 398) and USS *Burton Island* repaired the submerged petroleum lines at Sondrestrom and an MSTS ship will continue to serve as home to men who work in the Far North, just as other MSTS ships have done since operations were begun there.

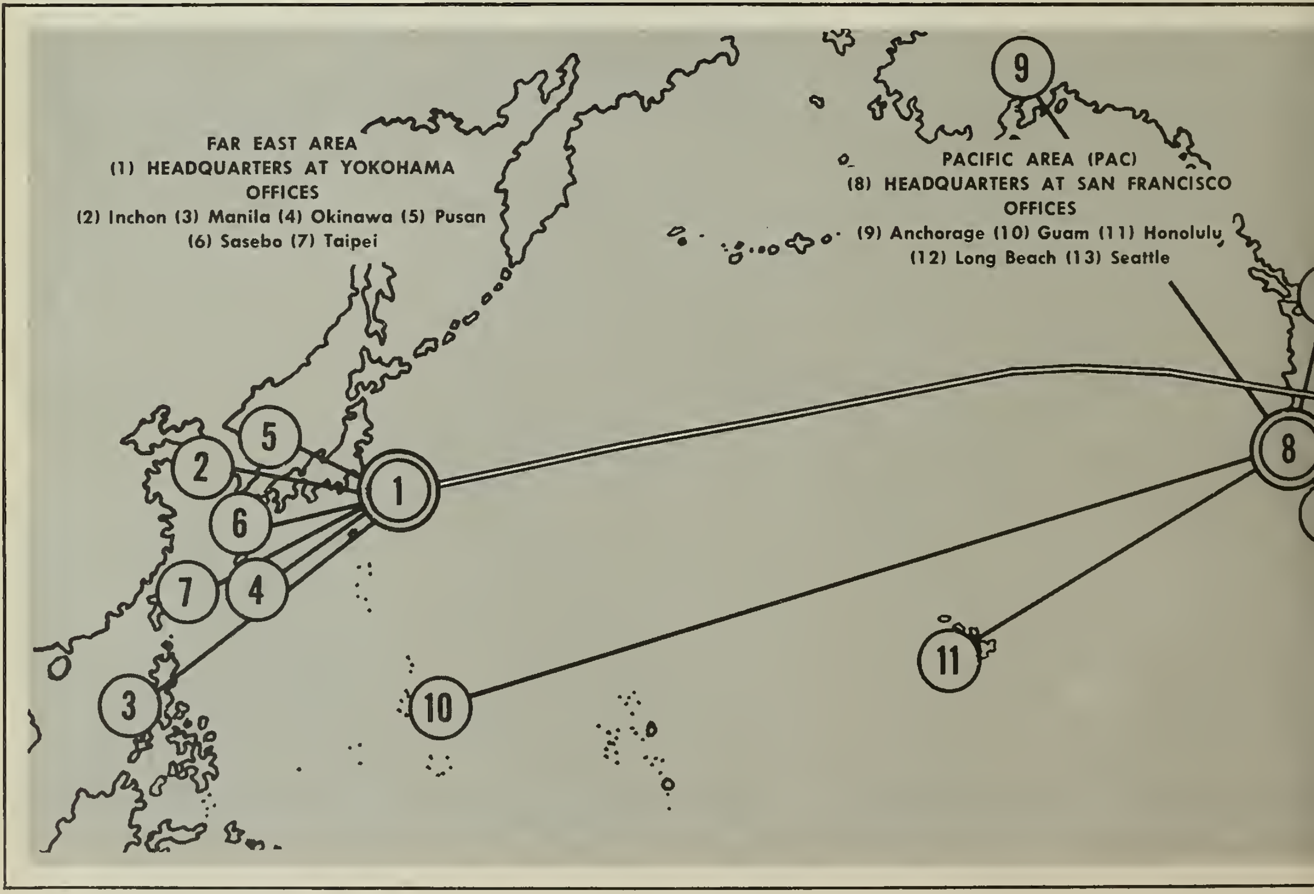
MSTS is rapidly acquiring a considerable fleet of special project ships which are used by those who explore the frontiers of space and who probe the ocean depths.

MSTS ships that support space explorations are used principally for tracking and nose-cone recovery from rockets fired to collect weather and other data from the upper reaches of the earth's atmosphere.

TODAY'S TRACKING SHIPS are converted freighters which have been equipped with telemetry, data-processing and radio instruments as well as recovery facilities for retrieving nose cones.

Some of the tracking and recovery ships now in use owe their present assignments to the inadequacy of earlier range trackers.

For example, the first recovery and tracking ships used by the scientists at NASA's rocket-launching facility at Wallops Island were two small T-1 tankers. They had been


FAR EAST AREA
(1) HEADQUARTERS AT YOKOHAMA
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(2) Inchon (3) Manila (4) Okinawa (5) Pusan
(6) Sasebo (7) Taipei
PACIFIC AREA (PAC)
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chartered to act as telemetry ships for a series of shots from Wallops Island.

Unfortunately, the worst storm to hit the East Coast in many a year struck without warning in mid-March, with a fury which literally changed the contour of the eastern seaboard of the United States.

Needless to say, the two tankers took a beating. The ships limped back to port after the storm with decks covered by the twisted wreckage of NASA's expensive equipment.

THE LESSON was readily apparent. A ship which was permanently instrumented to track and recover shots from Wallops Island was necessary. USNS *Range Recoverer* (T-AG 2) was selected and sent on duty with NASA in April, following the storm in March.

Range Recoverer was not new to the missile tracking and recovery business. Before being assigned to NASA, she had been working on the Pacific Missile Range.

She and six onetime Victory ships, three of which saw service with MSTS as freighters before conversion, now form the MSTS missile tracking and nose cone recovery fleet.

While the range tracking ships look upward, MSTS' oceanographic ships explore the ocean's depths. There are four oceanographic research ships in the MSTS Fleet. Two of them were converted to serve their present purpose and two, USNS *Davis* (T-AGOR 5) and *Gillis* (T-AGOR 4) were built from the keel up as research ships. Lead ship of this type is *Gibbs* (T-AGOR 1), a converted small seaplane tender.

USNS *Eltanin* (T-AGOR 8) is a good representative of the MSTS research ship and is an example of the cooperation which exists between MSTS and other government agencies.

In *Eltanin*'s case, the other agency is the National Science Foundation, which sponsors the Antarctic research program to which *Eltanin* has been assigned.

MSTS converted *Eltanin* into a floating laboratory to meet the requirements of the National Science Foundation's Antarctic research program. NSF scientists, together with the scientists from five universities, one college, a research foundation and a museum, conduct observations of the ocean's water and the ocean floor.

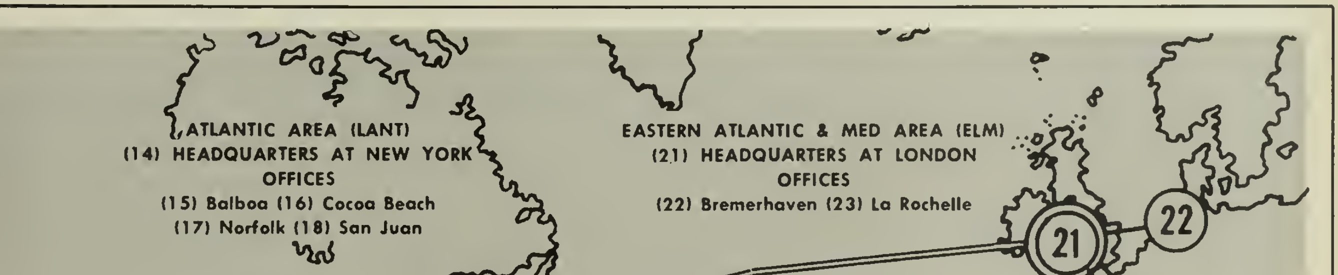
TO FREEDOM — Hungarian refugees celebrate as MSTS sails for USA.

They also study marine biology, submarine geology and meteorology, and do astrophysical research.

To be sure she would stand up against the rigors of Antarctic weather conditions, *Eltanin* left New York harbor, after she was fitted for her special work, to seek out bad weather. She found it off Labrador, where her unusual stability, provided by special rolling tanks, was tested.

The ship, by now a veteran, has an ice-strengthened bow and heavy hull. The data which she collects will be of immeasurable value to the Navy.

—Robert Neil.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(14) HEADQUARTERS AT NEW YORK
OFFICES
(15) Balboa (16) Cocoa Beach
(17) Norfolk (18) San Juan
EASTERN ATLANTIC & MED AREA (ELM)
(21) HEADQUARTERS AT LONDON
OFFICES
(22) Bremerhaven (23) La Rochelle
MEDITERRANEAN SUB AREA
(24) HEADQUARTERS AT LEGHORN
OFFICES
(25) Casablanca (26) Naples
GULF SUB AREA
19) HEADQUARTERS AT NEW ORLEANS
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LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

LvRats, ComRats

Sir: I am assigned to an afloat command, which has a flagship, but for administrative purposes certain members of the command, including myself, are stationed ashore. We do not draw sea pay except when we are actually aboard the flagship for eight or more days.

SecNav Notice 7220 of 28 Dec 1961 (Alnav 60) states that commuted rations and leave rations at the rate of $1.20 per day are payable to those persons prohibited sea and foreign duty pay by paragraph 044060-2B (3) of *NavCompt Manual.*

I'd like to know how much leave rations/commuted rations we should be drawing. — B, Y.D., CSCA, USN.

● *In accordance with subparagraph 044060-2a (3) of "NavCompt Manual," when you are temporarily aboard the flagship for eight or more consecutive days you would get sea pay for the full period; if you spend less than eight consecutive days aboard, you get no sea pay.*

Now, we assume you wish to find out the correct rates for LvRats/ComRats both for when you are aboard the flagship and when you are ashore—but first, let's get our authority straight. You have erroneously cited subparagraph 044060-2b (3), "NavCompt Manual" as having been mentioned in Alnav 60, whereas the subparagraph actually referred to in Alnav 60 is 044060-3b (3).

The question of which ration rate is applicable is easily determined. When you are entitled to sea pay or foreign duty pay for a particular day, the LvRats/ComRats rate for that day is $1.20. If you are not entitled to either sea pay or foreign duty pay for a particular day, the ration rate for that day is $1.07, with this exception: if your home of record is Alaska, Hawaii, or a possession of the United States, you are not entitled to foreign duty pay while stationed at your home of record. In such cases, however, the LvRats/ComRats rate is $1.20 per day. — Ed.

On-the-Job Training

Sir: I am converting from CS2 to EM2 under the SCORE Program. I now have my orders to Class "A" school for electricians.

Upon successful completion of this course, it is mandatory that I have one year of on-the-job training.

I have enough sea time to place me on Seavey either as an EM2 or CS2. Does this one year of on-the-job training have to be done as sea duty or am I eligible for shore duty? — W. J. S. CS2, USN.

● *There is no regulation specifying that the one-year period of on-the-job training be served on shore or at sea, as long as it is EM type duty.*

However, Class "A" School graduates are usually sent to sea where their training may best be utilized (Art. 12.82d, "Enlisted Transfer Manual").

This is because shore duty billets are normally filled four months in advance, whereas students become available only after the successful completion of their courses. — Ed.

No Duty With Foreign Navies

Sir: Not long ago, you ran several articles on the Royal Navy which I found very informative. It was interesting to compare our Navy with the British Navy from which much of our tradition springs.

I have a question which you might be able to answer for me. Is it possible for a United States Navy enlisted man to request exchange duty with the British Navy?

I would like to go on a cruise similar to our Med cruise but in a British ship.

When I was stationed at the Damage Control Training Center at Philadelphia, there were many foreign students attending the school, too. I liked to talk to them and compare our Navy with theirs. I'd like to serve with them on a cruise. — C. M. B., Jr., YN2, USN.

● *Your idea is an interesting one and, as you may already know, has been practiced (although not exactly in the same manner as you suggest) in ASW forces such as Task Group Alfa.*

The Navy feels that such an exchange promotes a better understanding of the other fellow's problems and increases mutual cooperation and support—important elements in groups composed of mixed forces.

At the present time, however, the U. S. Navy doesn't consider it necessary to set up a personnel exchange program on an international basis. — Ed.

DD to DD Refueling?

Sir: Recently during Springboard Exercises a unique feat was performed by Destroyer Squadron 24. USS *Blandy* (DD 943) provided a substantial amount of fuel for USS *Charles S. Sperry* (DD 697). A refueling rig devised by Chief Boatswain's Mate Frederick W. Heitmann, USN, aboard *Sperry* was used for the destroyer to destroyer refueling.

This refueling rig consisted mainly of the regular highline gear with a trolley to carry the end of the hose to the refueling ship. The usual inhaul and outhaul lines were used. Extra saddles were made to carry the hoses and spacer lines were used between the saddles.

The ships received a well done from the squadron commander and Chief Heitmann was presented a letter of commendation for the exercise which proved the feasibility of destroyer to destroyer refueling.—G. R. Savage, ENS, USNR.

● *As a rule we try to avoid the word "unique," but it may be that your exploit was truly "being without a like or equal—single; sole." BuShips seems to think so because our man there tells us that he had never heard of destroyer to destroyer refueling.*

Although the incident you cite certainly does prove that such refueling is

Port Island

Sir: On page 60 of your July issue, you have a picture of an aircraft carrier. All of us old tailhook sailors are curious as to the class of this ship. Nobody here has seen a carrier with an island on the port side. — Charles A. Bosarge, ATCA, USN.

—Has the U. S. Navy ever built a carrier with the island on the port side? — R. L. Riley, MM2, USN.

—It has caused a great deal of comment around the Naval Ammunition Depot at Concord, Calif. — P. P. Moore, GMGC, USN.

● *The carrier pictured on page 60 of the July 1962* All Hands *is rare. It belongs to the reversed negative class.*

It is for left-handed pilots who fly backwards in order to arrive at their destination before they depart.

If there are others in the class, their existence is so secret that their pictures have not been published in the pages of All Hands. *We hope, we never see this one again.* — Ed.

possible, we can't help but wonder about some of the details. DDs are not normally equipped with refueling gear. Where did Sperry *obtain her hose and pumping equipment? Our BuShips source tells us that it might be possible, in an emergency, to use fire hose and pumping equipment already on board, but this would probably only provide enough fuel to sustain a destroyer during the actual transfer, but could not provide enough to increase the amount of fuel in her tanks. If not fire hose, what then? If it was fire hose, who cleaned it, and how, after the transfer? We don't know; we're asking. You were on the scene and we weren't.*

Other destroyermen would no doubt be interested in further details if you or some Sperry *or* Blandy *crewmen could provide them.*—Ed.

Origin of Tattnall

Sir: DDG 19, now under construction in Westwego, La., will be named uss *Tattnall.* I would appreciate any information on the man for whom the ship will be named. — W.R.F., ENS, usn.

● Tattnall *will be named after Captain Josiah Tattnall,* usn, *and* csn. *CAPT Tattnall was born in Bonaventura, near Savannah, Ga., in 1795, and was appointed midshipman in the U. S. Navy on 1 Jan 1812. He advanced to the rank of captain on 5 Feb 1851, but resigned his commission at the outbreak of the Civil War to serve in the Confederate Navy.*

In 1813 at the age of 18, he was stationed aboard the frigate Constellation *and that year, when the British attacked Craney Island, near Norfolk, he was a member of the seamen's battery which drove off the British squadron and captured several barges.*

On 24 Aug 1814 he commanded a force of the employees of the Washington Navy Yard who took part in the Battle of Bladensburg. Later in the same year, he was ordered to the uss Epervier, *then fitting out for the Mediterranean Squadron, and took part in the operations against the Barbary States.*

While commanding officer of uss Grampus *in 1831, he captured the Mexican war schooner* Montezuma, *which earlier had boarded and robbed an American schooner on the high seas. He also had a prominent part in the attacks on Vera Cruz, San Juan d'Ullea and Tuxpan during the Mexican War.*

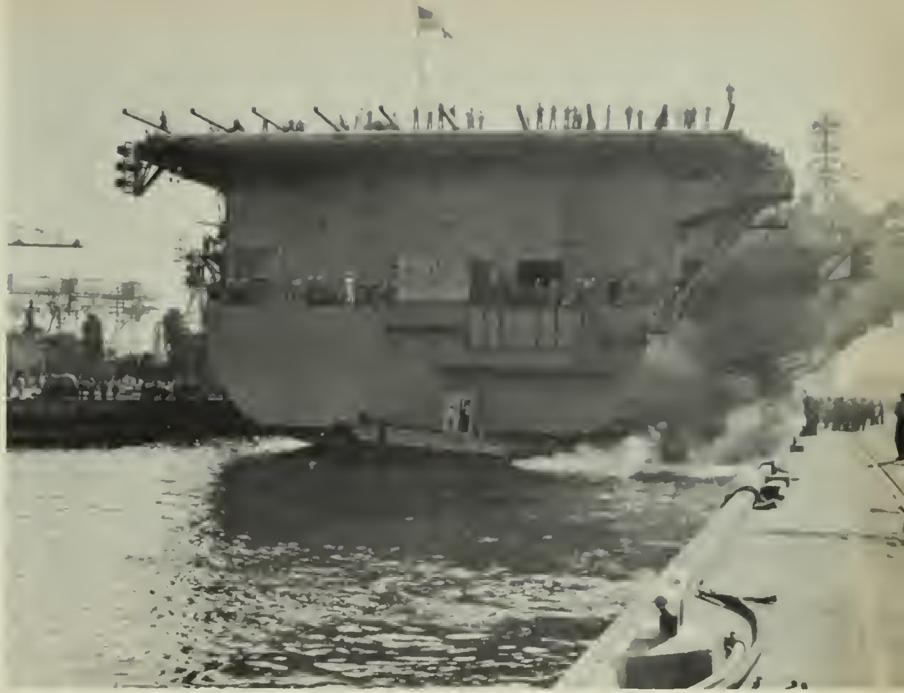
While commanding the East India Squadron in June 1859, he won an international reputation for a dispatch he sent to the Secretary of the Navy.

The river steamer Toeywan *had been chartered to take the American Minister up the Pei-ho river to Peking to ratify a treaty with the Chinese government, but Chinese authorities at the Taku forts had refused to let British and French ships preceding* Toeywan *go up the river. When the British and French attacked the forts and seemed to be losing, CAPT Tattnall went to the aid of the British.*

In defense of his action he used the expression "Blood is thicker than water," in his dispatch to the Secretary of the Navy to justify his violation of American neutrality. This statement won fame for CAPT Tattnall, and is popularly associated with him. However, he did not originate the phrase.

After he resigned from the U. S. Navy in 1861, he was commissioned a captain in the Confederate Navy, and in 1862, succeeding Captain Franklin Buchanan, commanded the naval defenses of the waters of Virginia, his flag in the css Virginia *until her destruction on 11 May 1862. He died in 1871.*

DDG 19 is the second Navy ship to be named Tattnall. *The first* uss Tattnall *(DD 125) was built in 1918 and served in World War II in both the Atlantic and Pacific.* — Ed.



FLIGHT DECK HANGOVER—USS *Saratoga* (CVA 60) enters Norfolk Naval Shipyard's largest drydock, which carrier clears by only three feet.

Kontradmiral Jones

Sir: If you really want to start an argument, bet someone that neither David D. Porter nor David Glasgow Farragut was the first U.S. naval officer to reach the rank of rear admiral. Be careful, however, that you state the conditions correctly.

Actually, John Paul Jones was an admiral many years before Farragut. The catch is, Jones was an admiral in the Imperial Russian Navy and Farragut was an admiral in the U.S. Navy.

Catherine the Great, Empress of Russia, appointed Jones a captain with rank of major general on 15 Feb 1788. Jones later hoisted his flag as a rear admiral in command of a Russian squadron.

You can find authority for this statement in Lincoln Lorenz's *John Paul Jones,* page 569, published in 1943 by the U.S. Naval Institute.—LCDR Arnold S. Lott, usn (Ret.).

● *A nice distinction and one which will undoubtedly generate much heat, and some light, in bull sessions.*

A copy of Lorenz was not immediately available, so we turned to Samuel Eliot Morison for confirmation. (We believe you, of course, but we like to check, just in case.) According to "John Paul Jones—A Sailor's Biography," he was made "Captain of the Fleet with rank of Major General" in the Russian navy early in 1788 (no specific date is given). On 15 Apr 1788, however, the Empress made him a rear admiral.

The first rear admiral in the U.S. Navy was David Glasgow Farragut, appointed in 1862. Farragut was appointed vice admiral in December 1864 and admiral in July 1866.

In the Russian navy, Jones was known as Kontradmiral Pavel Ivanovich (Paul, the son of John) Jones. In court circles, it was Contre-Amiral Paul-Jones.—Ed.

LAUNCH IN PORT — An S2F *Tracker* is catapulted from USS *Bennington* (CVS 20) while moored at San Diego, during demonstration for civic group.

First in Bay of Roses

SIR: In your June 1962 issue I read about the first which may not have been a first—the visit of USS *Duxbury Bay* (AVP 38) to Basra, Iraq. Now, I'd like to tell you about an event which I am fairly sure really was a first.

In September 1955, I was serving in Mine Division 82 in the Med. One day, while we were en route from Barcelona, Spain, to sweeping operations, a bad storm erupted, and we were forced to head posthaste for the protection of the nearest harbor.

You know how it is—any old port in a storm. We pulled into the Gulf of Roses (or Rosas), on the Spanish coast near the border of France. Unfortunately, there was no liberty granted during our stay there, for I would have enjoyed exploring the country thereabouts, and visiting the small town which was visible about a mile from where we were anchored.

At any rate, since the Gulf of Roses is not a regular port of call for U. S. Navy ships, I feel pretty certain that we are the only ones to have put in there. — R. W. Gilman, YN2, USN.

● *By Woden's whiskers, won't they ever learn?*

Okay, Yeoman Gilman—duck, and don't say we haven't warned you. And, just for a starter, what makes you think your storm was the only storm that's ever hit that particular section of the Med while a U.S. ship was in it? — ED.

Another Record Goes Overboard

SIR: Claims of record fuel rigging times are frequently made, but USS *Charles P. Cecil* (DDR 835) asks if any ship has spent less time alongside to complete a fueling operation.

Fueling in the Sixth Fleet from USS *Allagash* (AO 97), *Cecil* was alongside only 14 minutes, 15 seconds. During this time, she received 468 barrels of fuel oil and transferred movies and mail. The time was measured from the first bolo in hand to the last line cast off.

In the same fueling, *Cecil* broke the record rigging time for ships fueling from *Allagash*. Two minutes and 10 seconds after the first light line was received, both fueling stations were receiving fuel oil, and the highline was in use. *Allagash's* previous record of three minutes had also been set by *Cecil*, four months earlier.—C. P. Rozier, CDR, USN, Commanding Officer.

● *As you know, Captain, you are leaving yourself open to Fleetwide comment, so stand by. We think* Cecil *should be commended for the operation, however, whether it's a record or not.* — ED.

Boats and Best Friend

SIR: I would appreciate any information at your disposal concerning a school for dog handlers or sentry instructors. I'm on overseas service, and am due to be rotated to U. S. shore duty in a few months.

For a year and a half I attended a dog handlers' school during my off-duty hours. The school is a civilian type, operated by the French in Port Lyautey, Morocco. I completed the course, or, I should say, my dog and I completed the course recently, and have since won a championship certificate issued by the Moroccan government for competition with dogs and handlers from schools throughout Morocco.

Training courses required for U. S. sentry dogs are surprisingly similar to the curriculum of the school we attended. Is there any possibility I might be assigned to a sentry dog school upon completion of my overseas tour? If not, how are my chances for assignment to a station that uses dogs for security purposes?

Any information you have will be greatly appreciated. My dog, incidentally, is a full-blooded German shepherd. He's a mighty fine animal. — J.E.C., BM2, USN.

● *Sorry, Boats. The Navy does not sponsor training courses in dog handling. But, here's some news that may cheer you and your canine companion. As you know, you've been made avail-*

MIGHTY MITE — USS *Chowanoc* (ATF 100) shows her muscles towing former ASW carrier *Philippine Sea* (CVS 47).

able for assignment to the 12th Naval District. As a result of your letter, the Enlisted Personnel Distribution Office, Continental U. S., has been advised of your special qualification as a dog handler.

Epdoconus *is screening all activities in the U. S. to find out if a billet for a dog handler is available. If there is a billet, you will get the nod, even if it's not in the 12th Naval District. If a billet is not available, you can expect rotation to a general shore duty billet in 12ND.*

Congratulations on your successful competition in Morocco. All Hands *would enjoy hearing from you when you receive your orders from* epdoconus. *We'd like to see your story have one of those good old happy endings.* — Ed.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS MAGAZINE, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- uss *Idaho* (BB 42)—The sixth annual reunion will be held at the Lafayette Hotel, Long Beach, Calif., on 19-21 July 1963. For complete details, you may write to David C. Graham, SMCS, usn, P.O. Box 8048, Norfolk 3, Va.
- uss *New Mexico* (BB 40)—The fourth annual reunion will be held on 17 November at the Long Beach Elks Club, Long Beach, Calif. For details, write to Joe Allegretti, 1228 N. Broadway, Apt. 4, Santa Ana, Calif.
- uss *West Virginia* (BB 48)—The eighth annual reunion is scheduled for 8 December at the VFW Hall, Gardena, Calif. Additional information may be obtained from R. A. Brown, VFW Hall, 1822 W. 162d St., Gardena, Calif.
- uss *Wadsworth* (DD 516)—A reunion is being planned for August 1963 in the Chicago area. For details, write to W. S. Mandel, 5011 Elmhurst, Detroit 4, Mich.
- World War II Veterans—A reunion for men who were at Pearl Harbor or in the South Pacific on 7 Dec 1941 will be held in Dallas, Texas, on 7, 8 and 9 Dec 1962. For further details, write to Pearl Harbor Veterans, P.O. Box 3902, Station A, Dallas 8, Texas.

More on *Laws*

Sir: Your article "Nine Battle Stars for *Laws*" in the July 1962 All Hands Letters to the Editor section took uss *Laws* (DD 558) from 1945 to 1961, with the statement she was placed out of commission 24 Sep 1945 and reactivated in October 1961. What happened to her Korean conflict record, and those post-Korean years to 1958? She did a fine job in the Far East as a member of desdiv 72 until transferred to the Reserve Fleet in 1958.

Since that time, *Laws* has been taking Reservists on regular training cruises with quite a measure of success.

I did not serve in *Laws*, but I was in the same division ('55 and '58). Stand by when those who served on board her and know her history best read your article. — J. J. Hootman, LT, usn.

- *We didn't stand by for long. See below.* — Ed.

Sir: At least one interesting chapter in the history of uss *Laws* (DD 558) was passed over by All Hands in the July 1962 letters section ("Nine Battle Stars for *Laws*," p. 29). You indicated she was not active from 24 Sep 1945, when she was placed out of commission, to October 1961, when she was called up under the emergency reactivation program. *Laws*, in fact, saw plenty of action in between.

Recommissioned in late 1951, *Laws* served an eight-month tour in WestPac, during which she earned the China Service Medal, the National Defense Service Medal, the Korean Service Medal with two battle stars, and the United Nations Service Medal. She was bombline commander for several weeks; made various sweeps (undergoing enemy fire and destroying the enemy battery with counter fire in one Korean port); destroyed gun emplacements, machineguns, pillboxes, and other targets near the bombline; and shot up at least one train. She also served as a unit of the Taiwan Strait patrol.

I was relieved of command of *Laws* in the fall of 1953, and next encountered her in 1959. She was placed under my operational control (comdesdiv 192) for a few days during a West Coast amphibious exercise. She was still in commission as a Naval Reserve ship, and was still operating with her old speed, dash and smartness. I believe she was to be deactivated (after recall last year) in August 1962. — W. Y. Howell, CAPT, usn, CO, uss *Sandoval* (APA 194).

- *Thanks for filling in the empty years. The ship's history on which* All Hands *based the July report on* Laws *apparently didn't go far enough.*

Incidentally, in rechecking Laws' *history, we also discovered that after World War II, she remained in commission until December 1946—not September 1945, as we had implied.* — Ed.

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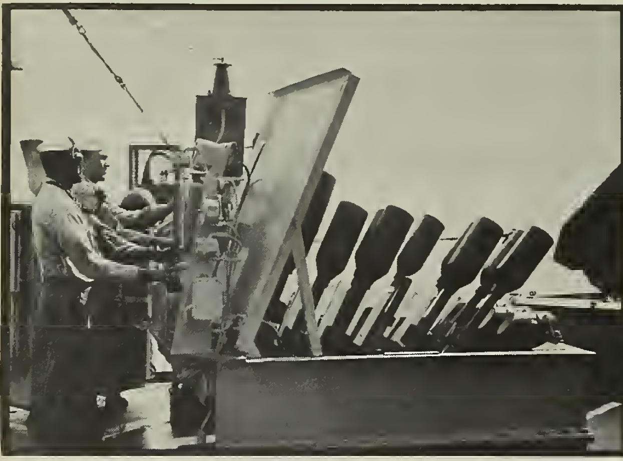
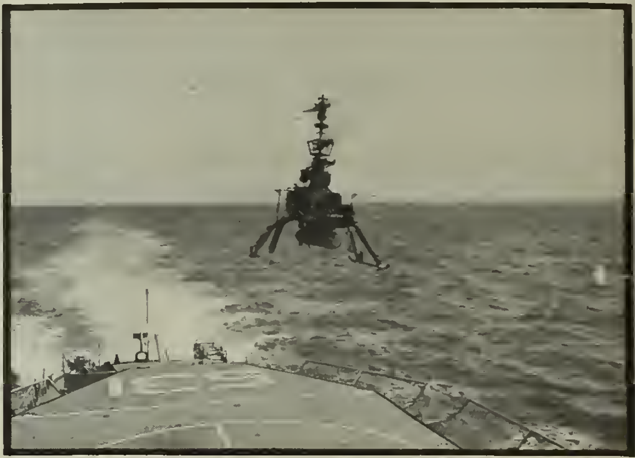
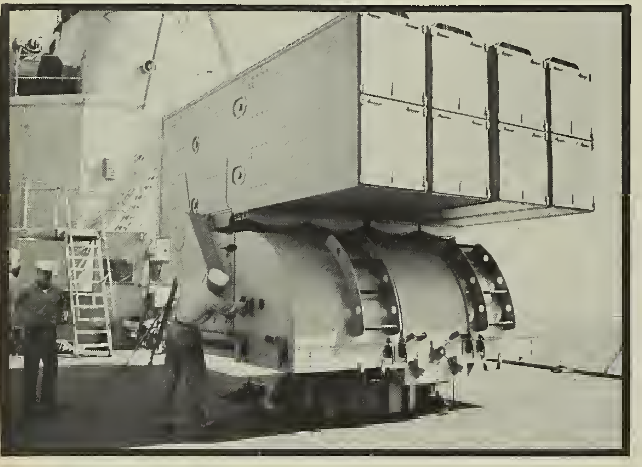


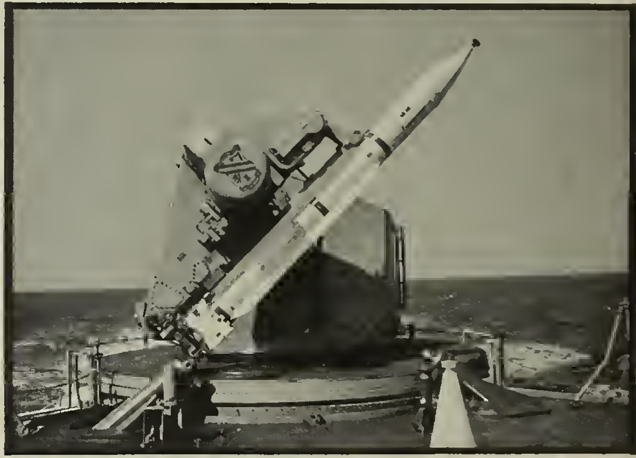
HEDGEHOGS—Sonar target contact provides fire control information for a hedgehog attack. The mortar-type projectiles are fired electrically in a pattern of twenty-four charges. They must score a direct hit on a submarine to explode.



DASH (Drone AntiSubmarine Helicopter)—This remote-controlled helicopter is able to carry one or two acoustic homing torpedoes to a target contact point, drop when ordered, and return to the mother ship while the torpedoes seek their targets.

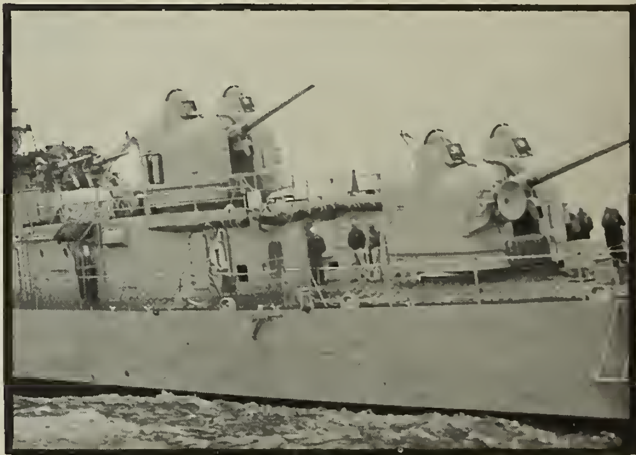


ASROC (Antisubmarine Rocket)—*Asroc* is a surface-to-underwater, solid propellant, rocket-thrown torpedo. Fired from the above launcher, it follows an aerial trajectory to the target area and homes in acoustically. A nuclear depth charge payload can be used.



TARTAR—Smallest of the surface-to-air series, *Tartar* is designed for destroyer type ships. It is effective against both low- and high-altitude targets. Powered by a dual thrust, solid propellant rocket motor, its range is more than 10 miles.

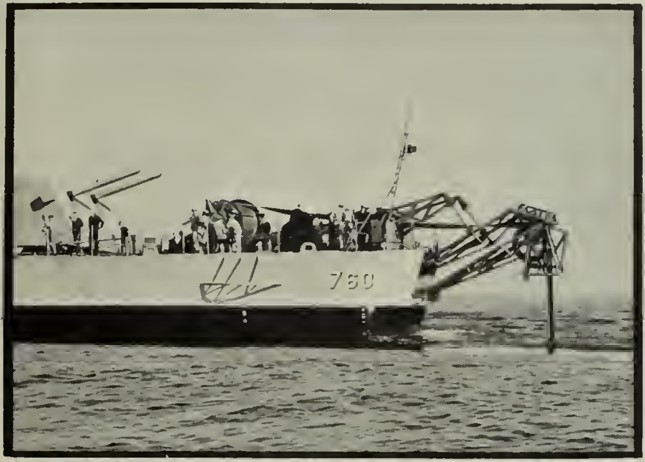
DEPTH CHARGES—Long the scourge of enemy submarines, depth charges are fired from 'K' guns or dropped (*above*) into the target area. They destroy by the concussion of their underwater explosions and need not make a hit to cripple a sub.



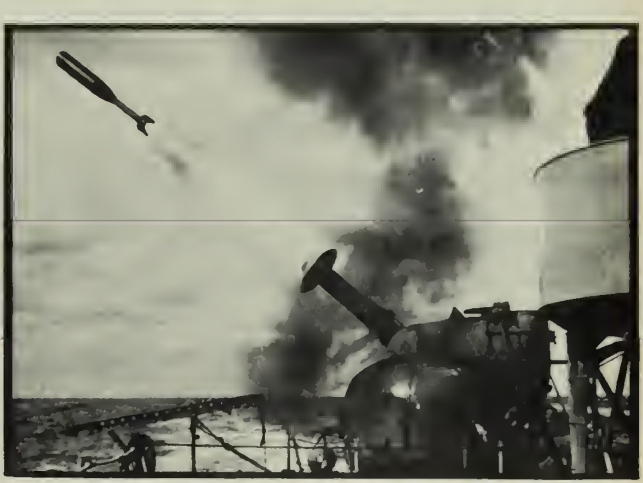
FIVE-INCH GUNS—The new rapid-fire, fully automatic-loading, radar-controlled single mount 5-inch/54 (on *USS Forrest Sherman*) replaces main-battery 5-inch/38 used for salvos at surface targets, shore bombardment and AA barrage in WW II.

Prepared by ALL HANDS Magazine

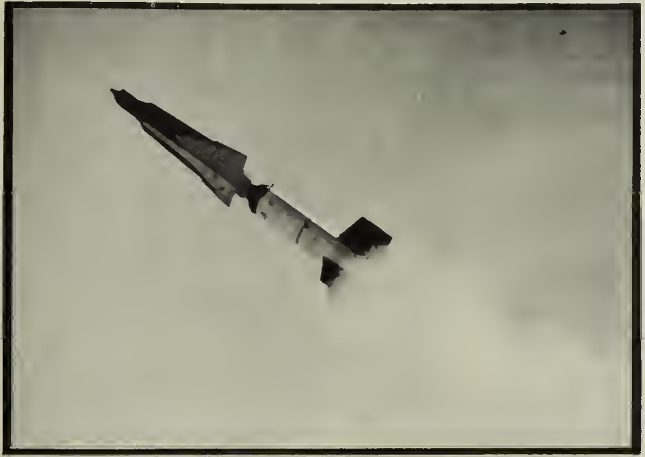
the DD NAVY



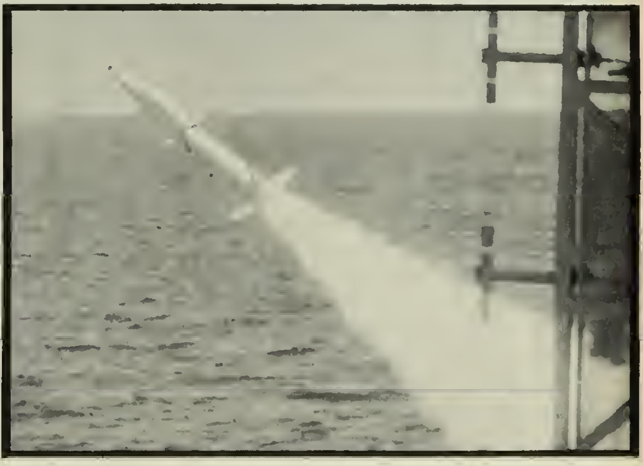
VARIABLE DEPTH SONAR (VDS)—A one-ton sonar dome is trailed behind the ship and controlled by the cable from the reel above. It can be trailed at any reasonable depth and can penetrate thermal layers to seek out submarines.



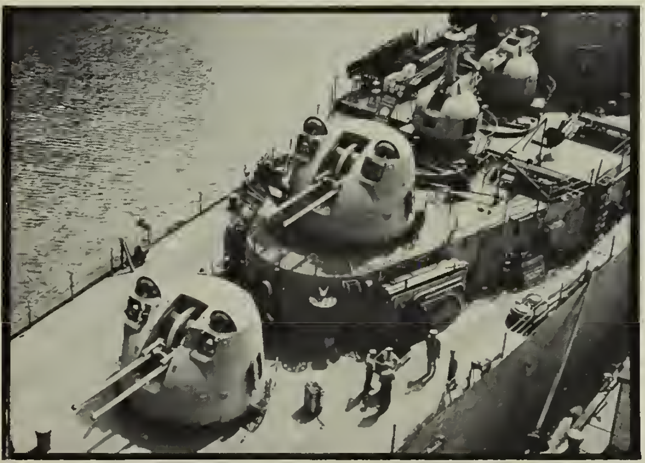
WEAPON ALFA (formerly Weapon *Able*)—*Alfa* is a surface-to-underwater rocket fired from a launcher resembling a conventional gun turret. The turret can be trained in an almost complete circle and is aimed by a special fire control system.



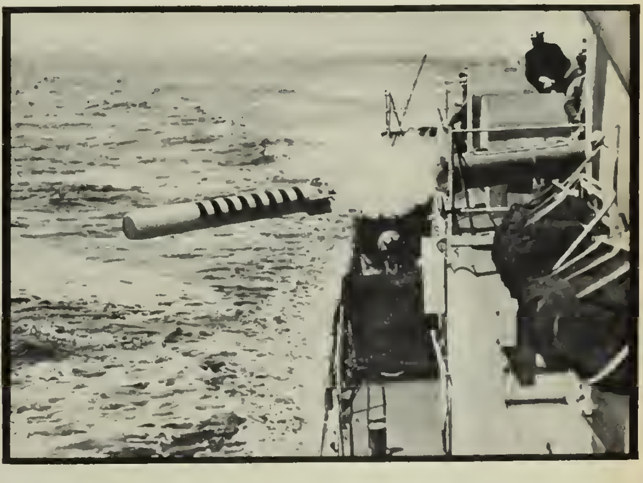
TYPHON—*Typhon* will employ advancements of *Super Talos* program (long range *Typhon*) and *Super Tartar* (medium range *Typhon*). The former will use solid fuel rocket booster and ram-jet sustainer. The latter will employ dual thrust solid rocket motor.



TERRIER—This supersonic surface-to-air solid fuel missile can soar higher than antiaircraft fire to a range of 20 miles. Controlled by a radar beam, *Terriers* have a length of about 27 feet with booster and weigh about one and a half tons.



THREE-INCH GUNS—The 3-inch/50 is being replaced by the new, longer range 3-inch/70 (twin, dual purpose mounts, shield enclosed, shown here on *USS Norfolk* DL 1). Twin guns can be fired separately or simultaneously, with single or continuous fire.



LAUNCHED TORPEDOES—Today's torpedoes may be fired from a fixed-tube mount (seen here) or flung over the side from an open launcher. With advanced guidance, such as the acoustic homing torpedo uses, these torpedoes need no longer be aimed.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

TO STARBOARD — Canada's HMCS *Bonaventure* passes USS *Newport News* (CA 148) moored at Halifax, Nova Scotia, Canada, for a short visit.

Three New Subs

To the delight of the champagne makers, three new nuclear-powered submarines were launched in one day last August. *Alexander Hamilton* (SSBN 617), *Haddo* (SSN 604) and *Dace* (SSN 607) were eased off their construction ways during ceremonies in three cities.

At Groton, Conn., *Alexander Hamilton*, equipped to handle the 2500-mile *Polaris A-3* missile now under development, splashed into the Thames. She is fitted with special computers to be used when a fix-from-space system becomes operational. (Four navigation satellites in polar orbits at altitudes of 600 miles will feed signals into shipboard computers which translate the signals into definite position fixes.)

Alexander Hamilton is the second *Polaris* missile submarine of the *Lafayette* class. The first was *Lafayette* (SSBN 616).

Launched at Pascagoula, Miss., was the attack submarine *Dace* of the *Thresher* class.

At Camden, N. J., another *Thresher*-class sub was christened *Haddo*.

Dace and *Haddo* are 279 feet in length and displace 3750 tons (standard displacement). Their launchings boosted the number of waterborne attack nuclear subs to 22, 16 of which are in commission. Nine others are under construction, and eight more have been authorized under the fiscal year 1963 shipbuilding budget.

YESTERDAY'S NAVY

On 4 Nov 1942 United States cruisers and destroyers bombarded Japanese positions near Koli Point, Guadalcanal. On 8 Nov 1942 Allied forces invaded North Africa. On 8 Nov 1861 the U. S. frigate, *San Jacinto* stopped the British steamer *Trent* and seized Confederate commissioners who were on board. On 12 Nov 1942 the naval battle of Guadalcanal opened as transports unloaded troops at Lunga Roads. On 12 Nov 1942 a U. S. naval operating base was established at Casablanca. On 25 Nov 1918 the NC-1 Flying boat carried 51 persons in flight for a new world's record.

Gorch Fock Visits

Early this year, New York harbor was treated to an unusual sight, even for New York harbor. There, at the foot of the Statue of Liberty, passed a 240-foot windjammer under full sail, cutting majestically through the water like a proud queen.

She was *Gorch Fock*, the German Navy's training ship and the first German naval vessel to enter New York harbor since 1936.

The harbor gave *Gorch Fock* its traditional welcome with whistles blowing, sirens growling and fireboats spouting fountains of water.

Pier employees watched in amazement as *Gorch Fock's* crewmen ran nimbly up the rigging and seemed to hang in midair above the water as they quickly reefed the sails.

Traffic on the West Side Expressway came to a halt as motorists discovered a windjammer occupying the berth usually reserved for the somewhat larger ss *United States*.

Every officer of the German Federal Navy is now required to take a cruise in *Gorch Fock*. So far, 1400 have done so.

Gorch Fock is a three-masted, steel-hulled bark which displaces 1860 tons. She has 1950 square meters of sail and has an auxiliary 800 hp engine just in case of a calm day.

With the engine, she can attain a speed of 10 knots and has a range of 1900 sea miles.

The windjammer is equipped with 20th century safety features. She has two radar sets mounted in such a manner that they can scan her surroundings both ahead and astern. She also carries a meteorologist and a complete meteorological station.

The ship is divided into seven compartments by means of six watertight bulkheads. Her keel carries fixed iron ballast and her hatches and deck openings are so designed that water will not get in, even at maximum heel.

Gorch Fock was in New York for a week during which time uss *Essex* (CVS 9) returned the warm hospitality she had received while visiting Hamburg in January.

Essex, at the time of the sailing ship's visit, was drydocked at New York.

While *Gorch Fock* was a guest, *Essex* provided a German-speaking officer who lived aboard and acted as liaison officer. He was aided by several of *Essex's* German-speaking enlisted men who handled the training ship's busy switchboard.

The windjammer was opened for public inspection and *Essex* men found New Yorkers as curious about a sailing ship as the Germans had been about *Essex* when she visited Hamburg. Again, *Essex* men were on hand to direct the crowd.

The German crew members had a busy week in New York and its environs. They enjoyed what amounted to a busman's holiday by taking the trip around Manhattan by boat.

They visited West Point, the United Nations and Rockefeller Center. There were also parties and dances.

In case you are wondering why sailors of the 20th century are training on a 19th century type ship, here's the *Gorch Fock's* explanation:

Most floating units in the German Federal Navy are small and have to operate in waters where navigational and meteorological difficulties abound.

This fact alone calls for particularly high standards of seamanship on the part of the comparatively young men who command these small units.

Training in a sailing ship is better than any other type of training for attaining these standards. It makes a man familiar with the sea, develops a feeling of dependence on wind and weather and it accustoms the men to working closely with their comrades.

It instills toughness and courage because the crew members have to throw themselves into their jobs in all kinds of weather. It develops personalities with the power of decision and character traits necessary in an officer at sea.

Remember This Sea Duty?

Once upon a time there were some U. S. sailors who drew some pretty unusual sea duty—well, at least it was called sea duty and it was in boats and on water.

One of the things that made this sea duty less ordinary than other sea duty was that, when a Navyman stood on deck and looked from port to starboard, he could see, instead of water, water everywhere, craggy peaks topped with turreted castles in which a wicked bishop was once consumed by rats and travelers were incarcerated by greedy barons.

DECKED OUT — A 'yellow shirt' directs an A3D *Skywarrior* to port cat aboard *USS Franklin D. Roosevelt* (CVA 42) during training cruise.

The reason the sailors were able to see such unusual scenes on this sea duty was because they weren't on the sea at all; they were on the River Rhein in the Rhein River Patrol.

These sailors sailed their little ships up and down the River Rhein looking for navigation hazards which could easily have caused considerable inconvenience to U. S. troops in Germany during the touchy era immediately following World War II.

The little ships still sail up and down the River Rhein but they are no longer operated by American sailors pulling a lucky bit of sea duty.

They are now manned by soldiers of the Federal German Army under the command of the 706 Regimental Headquarters, Mainz, and are divided up among three companies of Rhein River Engineers.

The little craft are used in the territorial defense program and for logistical support of NATO and territorial troops all over West Germany.

The three companies, each composed of 300 officers and enlisted men equipped with nine PT boats and 12 landing craft, are located at Shierstein, Koblenz and Karlsruhe.

The river craft were transferred to the German government in 1958. German soldiers were trained by U. S. sailors and received further instruction from the French Ecole de Pilotage. Several of the Army sailors obtained pilots' licenses.

The German soldiers now train in demolitions, minelaying, bridge construction and other aspects of seagoing engineering. They take an annual seven-week training cruise on the Baltic Sea.

When the small craft aren't working, USN alumni can still see them moored at Shierstein near Wiesbaden,

They look about the same as when they were manned by the U. S. Navy. However, the craft are now painted green instead of gray and bear the iron cross instead of the United States ensign.

Second *Polaris* Squadron

The Navy's second *Polaris*-firing submarine squadron has been commissioned in Groton, Conn. It's SUBRON 16, to be homeported in Charleston, S. C.

New *Lafayette*-class subs will make up the squadron, along with the submarine tender USS *Hunley* (AS 31).

The first sub assigned to the new squadron will be the one for which the class is named, the 7000-ton USS *Lafayette* (SSBN 616). Others scheduled for commissioning and addition to the squadron between April and November 1963 are: *Alexander Hamilton* (SSBN 617), *Andrew Jackson* (SSBN 619), *John Adams* (SSBN 620), *James Monroe* (SSBN 622), *Nathan Hale* (SSBN 623), *Woodrow Wilson* (SSBN 624) and *Henry Clay* (SSBN 625).

Windlass Is Big Help

The 54 enlisted men and five officers assigned to the salvage lifting ship USS *Windlass* (ARSD 4) can be sure there are not many U. S. Navy ships with a job like that of *Windeeloo*.

One of two salvage lifting ships in commission, *Windlass* is on call 24 hours a day and has answered calls for assistance in the west and north Atlantic, east coast of the U. S., Gulf of Mexico, and Carribbean Sea. During her career, *Windeeloo* has laid cables, done oceanographic survey work, conducted towing operations, refloated sunken and grounded ships, and recovered crashed aircraft, including one blimp. She was one of the salvage ships that helped refloat the battleship *Missouri* when that ship ran aground in 1950 at Norfolk, Va.

Both this year and last, she won the Battle Efficiency "E," and in 1962 also received the Engineering "E."

Windlass assisted in refloating the grounded destroyers USS *Baldwin* (DD 624) at Montauk Point, N. Y., in 1961, and USS *Monssen* (DD 798) at Holgate, N. J., in 1962. For these operations, the crew received SecNav commendation medals.

Built at Houston, Tex., in late 1945, she was originally designed as a medium-class landing ship. But the design was altered on the drawing boards and she became one of the four original ARSD types. Modifications to the basic design included the adding of two horns to the rounded bow, moving the superstructure all the way aft, strengthening the hull, and installing salvage and lifting gear. Upon completion, she was described as a "floating forklift." She was commissioned in April 1946 at Houston.

The ship is 225 feet long, with a beam of 35 feet. Her shallow-water draft of only 10 feet permits her to move over tops of sunken vessels or close inshore. With a tidal lifting capability of 600 tons, she can move over the top of a sunken ship, drop a steel cable and pass it under the wreck, lift it from the bottom by ballasting and deballasting, then carry it seaward into deeper water at high tide.

Eleven divers are assigned to *Windlass*. Diving in all types of gear, they are qualified in the use of underwater cutting and welding torches and all phases of salvage work.

BOW OVER STERN — Navy's floating instrument platform, FLIP, is in vertical position with 280 feet of craft's 355-foot hull submerged.

LOTS OF PICK UP — One of two salvage lifting ships in commission, USS Windlass (ARSD 4) is on call 24 hours a day for those in need of help.

Small Ships, Big Jobs

Size is no measure of worth, at least not where ships of the U. S. Navy are concerned.

Small ships, measuring 300 feet or less in length and displacing less than 1700 tons, are doing many jobs that affect the Fleet's ability to operate efficiently.

Although these ships may lack the glamor, speed and sleekness of the aircraft carrier, cruiser or destroyer, they have a capacity for hard work that belies their size. Their crews may range from about five to over 200 men.

One of the smaller ships is the inshore minesweeper (MSI). This ship is 110 feet long, shorter than the distance from first to third across a regulation baseball diamond. It is designed to keep inshore waters, such as harbors, bays, sounds, rivers and inlets, free from mines.

Two other minesweeping ships also fall into the small ship category. They are the coastal minesweeper (MSC) and the ocean minesweeper (MSO). Coastal sweepers measure 144 feet in length, have a crew of 40 men, and displace 320 tons. The MSOs are 665-ton, 171-foot ships manned by 75 officers and men. Performing minesweeping operations on the high seas, they act independently, whereas the MSC is confined to coastal waters.

All three of these mine countermeasure ships are specially built with wooden hulls and metals of the lowest possible magnetic attraction, a safety factor against magnetic mines.

Counted among the hardest working ships in the Fleet are the auxiliary ocean tugs and Fleet ocean tugs, ATAs and ATFs. They spend most of their time at sea towing barges, target sleds and other ships. They also do salvage work.

The larger one is the Fleet ocean tug, which is 195 feet from bow to stern and has a crew of 85 men. Displacing 1200 tons, this class of tug has four sets of diesel engines capable of producing over 3000 horsepower.

Auxiliary tugs are 60 feet shorter than ATFs and do work of the same nature, but on a smaller scale. They have a complement of 36 men, displace 500 tons, and can develop over 1500 horsepower with their twin diesel-electric engines.

The 207-foot salvage ships (ARS) serve much the same purpose as the ATAs and ATFs. Salvage ships do towing work as well as their primary salvage mission. These 1500-ton ships carry fire-fighting equipment, a special towing engine, salvage pumps and deep- and shallow-water diving gear. Approximately 30 per cent of the 85-man crews are qualified Navy divers.

Although they are seldom needed in their prime capacity, submarine rescue ships (ASR) are an important part of the Navy's submarine force. Equipped with modern diving gear and an egg-shaped diving-rescue bell, these ships can bring submariners up from a stricken sub within 90 minutes after commencing rescue operations. They are 250 feet long, displace 1600 tons, and have a crew of 85 men. As with the ARS, part of the crew are qualified Navy divers.

Most surveying ships (AGS) are 300 feet or less in length. Equipped with special hydrographic instruments, they serve as floating laboratories for oceanographic research.

Without these ships, the missile-firing, larger ships-of-the-line might find the going much rougher.

Hoel to the Rescue

The new guided missile destroyer USS *Hoel* (DDG 13) had completed her shakedown cruise and was ready to go to work. Constructed in the east and shaken down off Guantanamo Bay, *Hoel's* first order of business was to report to San Diego, Calif., via the Panama Canal, for duty with the Pacific Fleet. She arrived in San Diego a little late, but nobody seemed to mind.

While en route to the Canal Zone *Hoel* was diverted to rescue a powerless yacht that had been adrift for 10 days in the Carribbean with a mighty lonely lone occupant on board.

The yacht, a 35-foot sloop named *Star Drift*, was piloted by Dr. William B. Howell, a part-time sea adventurer sailing from England to Australia. Dr. Howell, who lives in Sydney, Australia, is an experienced sailor-sportsman. He had previously sailed alone from England to Tahiti and Hawaii.

To be "more sportsmanlike," Dr. Howell did not equip *Star Drift* with a radio.

Some 95 miles northeast of the Panama Canal, *Star Drift* was dangerously slowed by contrary winds and calms. Her auxiliary engine broke down after a momentary spurt of power. She was hopelessly adrift.

BACK WAY—R. W. Cook, CM2, and D. R. Hensley, BU1, of MCB-5 practice art of hand-to-hand combat.

Ten days later the sloop was sighted by the Greek freighter *Anastasia*. Her commanding officer notified Panama Canal authorities, who in turn alerted 15th Naval District headquarters. *Hoel*, only a few hours from the Panama Canal, was notified by 15ND to effect the rescue. *Hoel* changed her course and, after an hour of searching, located *Star Drift*.

Attempts by the destroyermen to repair the sloop's engine were futile. Next, a utility boat took the yacht in tow. This was too much for the utility boat; after a couple of hours, her engines overheated.

Finally, *Hoel* herself took over the towing operation.

Upon arrival in Cristobal, *Star Drift* was released for repairs. *Hoel* rested overnight, then continued on her way to San Diego.

At last report, *Star Drift* was shipshape and headed for Australia.

Recruiting Is Better

It was a big year for the Navy Recruiter. From July 1961 through June 1962:

- More than 102,000 men were recruited, exceeding the previous yearly high since 1956 by more than 14,000.
- The average recruiter signed up 45 men.
- Nearly 7500 more men were enlisted under the High School Graduate Training Program than ever before. (If he has been graduated from high school, the recruit may be guaranteed assignment to class "A" school after boot camp.)
- Of the total number enlisted, more than two thirds were potential class "A" school candidates, as indicated by mental tests.

Recruiting officials drew a number of conclusions:

(1) The Navy is becoming more attractive.

(2) The 2300 Chiefs and PO1s assigned to recruiting duty are good Navy salesmen.

(3) The new recruits are smart.

Polaris Facilities to PacFlt

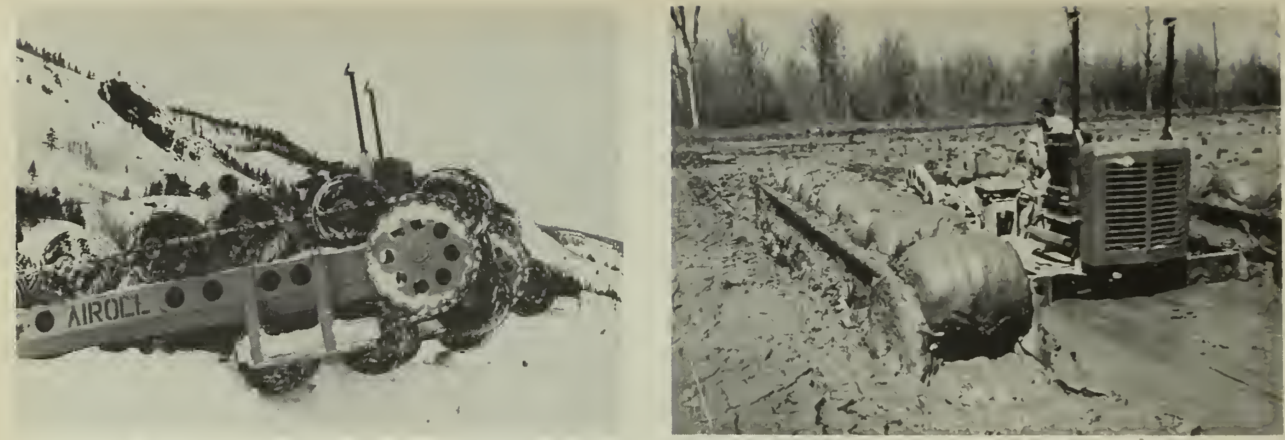
Nuclear-powered *Polaris* submarines and a ballistic missile sub tender have been earmarked for duty with the Pacific Fleet. How many subs, and how soon they'll be operating in the Pacific, has not yet been disclosed.

Apra Harbor, Guam, will be the tender's home port and a base for the subs. Dredging operations to make room for the ships have been in progress at Guam for several months.

An overhaul facility for *Polaris* subs has been established at Bremerton, Washington.

The Naval Ammunition Depot at Bangor, Wash., is taking on an additional role as a *Polaris* missile facility.

DESTROYERMEN watch from utility boat as USS *Hoel* (DDG 13) takes yacht in tow about 100 miles northeast of Cristobal, C.Z.



UNDERGOING snow and mud tests is a 19,000-pound vehicle, known as *Airoll,* which is being developed for the Navy.

Navy MARS Underway

Plans are underway for establishing a Navy Military Affiliate Radio System (Navy MARS) similar to the Army and Air Force MARS.

The Navy MARS will emphasize amateur radio operator training in naval communications procedures.

This will provide an opportunity for amateurs to maintain an affiliation with the Navy in addition to providing a source of trained operators for use in local disasters or general emergencies.

Many of the operators will be former Navymen who already have their own radio stations with assigned call signs. The traffic they will handle will be the morale kind which doesn't qualify for transmission over regular Navy circuits.

Navy MARS will begin operation in four areas at Naval District headquarters in Boston, Mass., Great Lakes, Ill., San Francisco, Calif., and New Orleans, La.

Eight active duty Navymen will be assigned to the initial phase of the program, and personnel will be increased as participation increases.

Navy MARS should not be confused with either the Naval Communication System, which handles official Navy traffic, or the Naval Reserve Communication System, which is used for Naval Reserve Training.

The new project will provide an official Navy program in which qualified U. S. amateurs can take part. It will promote a closer working relationship between the U. S. Navy, Naval Reserve, and amateur radio organizations.

It also will provide an emergency communication system on a local, national, or international basis, when regular communication systems are disrupted by disaster.

Amateurs who are interested can obtain complete information from Director, Navy MARS, Office of Naval Communications (OP-94), the Pentagon, Washington 25, D. C.

Rides Over Mud, Snow, Water

A new concept for off-the-road transport has been developed for the Navy. Called *Airoll*, it is designed to move a vehicle over ordinarily impassable terrain. It was developed by a private corporation under contract with the Office of Naval Research.

Airoll consists of a series of free-rolling, low-pressure pneumatic tires mounted on a chain which rotates around one driving sprocket and one idling sprocket. The chain travels only half as fast as the tires, moving them from the front to the rear of the vehicle and back again. The effect is like moving a heavy object by placing a series of rollers under it.

GOING UP — Flight model of advanced *Polaris* A-3 smokes skyward from pad at Cape Canaveral.

The number of tires required for the chain varies according to their size. Regardless of how many tires are used, they are driven from two power outputs, one on each side of the vehicle. This contrasts with a multi-wheeled vehicle which has a power output for each wheel.

In soft terrain the tires stop rotating individually and serve as cleats or grippers while the *Airoll* moves as a tracked vehicle. It operates easily in snow, packing its own roadway. In water the tires act as paddles, giving a speed of about 10 miles an hour.

The vehicle moves like any wheeled vehicle on a hard surface, reaching a speed of 30 miles an hour on a concrete road. In contrast to conventional tracked vehicles, it will not damage pavement.

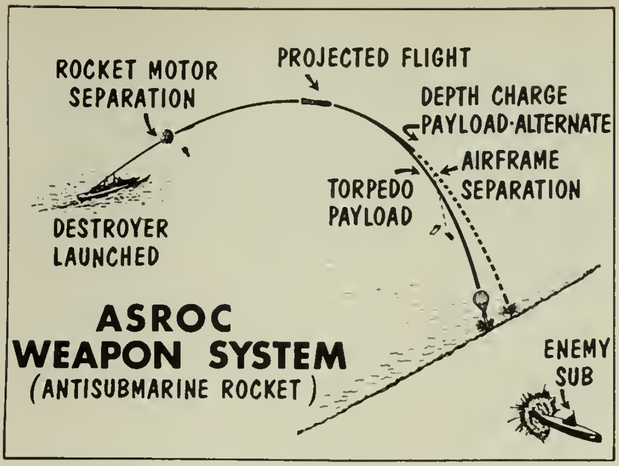
Powered by a standard automobile engine of about 80 horsepower, it is 14 and one-half feet long, about eight feet wide and nearly seven feet in height.

Eight *Airoll* vehicles have been ordered by the Marine Corps to be used as amphibious personnel and weapons carriers with about a half-ton payload.

Hitting the Books

The long day is over for Wayne H. Heiser, AECM, of the Naval Air Station in Minneapolis, Minn. Master Chief Heiser now puts in what many Navymen consider to be a normal day —that is, normal working hours. For the past 10 years Heiser has been attending college after work.

Heiser's long day started at Washington University in St. Louis, Mo., back in 1952. It ended this year when he was presented with a Bachelor's



SUB KILLER — Drawing traces *Asroc's* path to target. *Rt: Asroc* is launched from a ship in the Pacific.

degree in Business Administration at the University of Minnesota.

Other certificates of scholarly achievement the Navyman has earned include one from Washington University in electrical technology, and five from Navy service schools from which he has been graduated.

What next? "Guess I'll stay home after work and enjoy my hobby. It's reading."

PacFlt Gets *Asroc*

Surface ASW units of the Pacific Fleet are now being equipped with the antisubmarine rocket *Asroc*. The weapon is designed to locate, track and destroy enemy submarines while the attacking ship remains thousands of yards away.

Instead of being forced to close within a few hundred yards of a submarine to launch an attack, ships armed with *Asroc* can remain in formation and still attack effectively.

Asroc is a weapons system of four major parts. It consists of an underwater sonar detection device, a fire-control computer, a missile launcher and the missile. This is how it works:

A submarine is detected aboard ship by sonar equipment. The fire-control computer charts the course, speed and range of the contact. Then the launcher swivels into position for the attack. Fully automatic, it consists of eight cells arranged in two rows of four. One pair of cells at a time can be raised for firing. Missiles can be fired as rapidly as targets can be identified and tracked within an area of several miles around the ASW ship. Once the missile is launched, it follows a ballistic trajectory.

Approximately 15 feet in length and one foot in diameter, the missile can be used as either a torpedo or depth charge. It is composed of three pieces. A rocket booster lifts the missile from the launcher and falls free at a predetermined signal. The aluminum airframe joining the booster and the payload is jettisoned just before the payload enters the water.

If *Asroc* is employed as a torpedo, a parachute slows its plunge into the water. A seawater battery is energized after the torpedo hits the water. The torpedo then begins a homing search for the sub.

The missile can also be used as a depth charge, sinking to a predetermined depth and exploding with a large effective kill area.

FOR THE BIRDS — Melvin W. Ganas, IC3, USN, of USS *Springfield* (CLG 7) is greeted by pigeons as he tours San Marco Square in Venice, Italy.

Shipyard at Sea

Does your submarine need a tune-up? A new paint job? USS *ARD 30*, experienced in servicing submarines of the Pacific Fleet, is capable of providing repair and maintenance to most subs now in commission.

One of the Pacific Service Force's floating drydocks at Pearl Harbor, *ARD 30* is 494 feet-one inch long and 81 feet wide. She is a floating, miniature shipyard with shipfitting, machine, pipe, repair and carpenter shops. Capable of repairing ships other than subs, she has been based at the Pearl Harbor submarine base since December 1958.

In 1961 she drydocked 26 submarines. During the average two-week overhaul period, the crew of *ARD 30* repairs the submarine, changes propellers and paints the sub below the waterline. Foreign allies also drydock their American-made subs in *ARD 30*.

A sub drydocked in *ARD 30* is fitted with pre-cut, tailor-made blocks which hug her keel and brace her in place while repairs are made.

After drydocking more than 75 ships since 1958, *ARD 30* recently received a three-month overhaul. Since she has no propulsion motors, she must be towed to and from her operating sites.

She was commissioned 24 Jun 1945, going into service at Guam, where she repaired World War II battle-damaged ships. After the war, she moved to Portland, Ore., where she was on an in-service, out-of-commission status.

During the Korean conflict, she was at Tongue Point Naval Station, Astoria, Ore., preparing units of the Pacific Reserve Fleet for activation.

UNDERGOING sea trials in the Atlantic is USS *Bainbridge* (DLGN 25).

Two More Big Ones Meet the Fleet

Two new ships—both of them the first of their types—have joined the Fleet for active service. One, USS *Bainbridge* (DLGN 25), is the first member of the destroyer family to be powered by nuclear reactors. The other, USS *Raleigh* (LPD 1), is the Navy's first amphibious transport dock.

Bainbridge, commissioned at Quincy, Mass., in October, is the Navy's third operational nuclear-powered surface ship. (The others are the guided missile cruiser USS *Long Beach* (CGN 9), commissioned in September 1961, and the carrier USS *Enterprise* (CVAN 65), commissioned last November.)

During her first underway proof trials, *Bainbridge* demonstrated her designed full power and an ability to go from full speed ahead to emergency astern. In the course of the trials, which covered 570 miles, the new frigate burned less than five ounces of uranium.

The commissioning of *Bainbridge* was the highlight of a week-long celebration by the city of Quincy in commemoration of the 60th anniversary of destroyers. The name of the new frigate is especially fitting; it's the same as that of the first ship listed as a destroyer (*Bainbridge,* DD 1), 60 years ago.

The similarity between the old *Bainbridge* and the new ends with their names. DD 1 displaced 420 tons; DLGN 25 displaces over 8000 tons. *Bainbridge* of 1902 had a crew of 75; nearly 500 men serve on board today's *Bainbridge.* Armament on the old *Bainbridge* consisted of 3-inch guns and two torpedo tubes. The new frigate carries dual-purpose guns, antisubmarine rockets, and advanced *Terrier* surface-to-air missiles fore and aft.

The most notable difference, however, is in cruising range. DLGN 25, with her compact source of nuclear power, could remain underway almost indefinitely. Her high-speed endurance at sea is practically unlimited.

With a full load of coal, DD 1 could just make it across the Atlantic.

Raleigh was commissioned on 8 Sep 1962 at Brooklyn, N. Y. The new LPD is virtually an attack transport, landing ship, and attack cargo ship combined. She's designed to carry troops and their heavy equipment to an amphibious assault area, then land them by helicopter or with seagoing landing craft.

The LPD's well, similar to an LSD's, will carry nine LCMs for landing troops and equipment too heavy to be carried by whirlybird. A helicopter platform, built over the well, will carry six HR2-S amphibious transport helicopters for vertical envelopment operations during the amphibious assault.

The new LPD is the fourth ship to be named for the capital city of North Carolina. (The first *Raleigh* was a 32-gun Continental frigate, the second and third were cruisers launched in 1889 and 1922.)

Today's *Raleigh* is 521 feet in length and displaces 8040 tons (standard displacement). She is manned by 30 officers and 460 enlisted men. Her troop capacity is 930. *Raleigh* has room left over for 2000 tons of cargo.

AFRS Is Going For 30

Twenty years and more ago, any serviceman stationed in a part of the world beyond the reach of an American radio station had either to depend upon whatever his short-wave set pulled in from the mother country, or depended upon the local stations, if any, for his radio entertainment.

Then came World War II and men were uprooted from their homes by the thousands and flung into unfamiliar surroundings. That was when (in May of 1942, to be specific) the War Department decided a little familiar music and hometown news delivered via the radio would improve morale. Thus, the Armed Forces Radio Service (AFRS) was born. Its job was to aid, develop and operate radio stations to be established by the military service.

Since there was a lot of talent locally available, the AFRS set up shop in Los Angeles and was soon serving a mushrooming number of overseas stations. Kodiak Island, Alaska, became the first of 177 outlets which the AFRS served during World War II.

The programing was mostly canned. Each week the radio station received a shipment which was made up principally of de-commercialized copies of the latest popular shows on the American networks, together with recorded music and programs produced in Los Angeles especially for military listeners.

World War II veterans will remember shows to which top Hollywood talent contributed, such as *Command Performance, Jubilee, GI Journal* and *Mail Call.*

In addition to these star-studded programs, there were broadcasts of news, sports and special events which were received via short-wave broadcast. In this way, servicemen all over the world were given radio entertainment equal to the best available in the United States.

The war ended and most members of the armed forces came home. The number of Armed Forces Radio Stations was cut from 177 to 45. These were considered sufficient to serve the armed forces personnel remaining overseas.

When the Korean fighting broke out, the number of stations for the armed forces again increased, and television was added. Thus television stations were soon in operation at remote bases all around the world.

The first overseas television outlet was opened in October 1954 at Lajes Field in the Azores. It was soon followed by others and there are plans for still more.

Today, through short-wave, radio transcription and TV film, the Armed Forces Radio and Television Service reaches about 90 per cent of all Americans stationed overseas and on board Navy ships, providing for them a link with home which is so necessary to good morale.

Fleet Welcomes *Barney*

The guided missile destroyer USS *Barney* (DDG 6) was commissioned in August at the U.S. Naval Base, Philadelphia, Pa.

Barney is 431 feet long and displaces 3370 tons.

Barney was christened by the great-great granddaughter of Commodore Joshua Barney, USN (1759-1818), for whom the new guided missile destroyer was named. Commodore Barney served aboard *Hornet* and *Wasp* during the Revolutionary War. As a captain during the War of 1812, he commanded a fleet of gunboats which participated in the defense of the Chesapeake Bay.

Hydrofoil Patrol Ship

The Navy's first hydrofoil patrol craft, *High Point* (PCH 1), has been launched at Seattle, Wash. Using information gleaned during 10 years of study by Navy and industry, designers hope the craft will prove that a hydrofoil coastal patrol ship is practical.

It is a small, relatively inexpensive craft designed by the Bureau of Ships and built by a private company. High-speed submarines may be attacked with the craft's four Mark 44 torpedoes.

High Point is 117 feet long, weighs 110 tons, and when flying on submerged foils, reaches speeds of more than 40 knots. Two 3000 hp gas turbine engines power its foil-borne operations. When the ship is not using the foils, it may use either the gas turbines or an auxiliary 600 hp diesel engine. Foil-borne, it has a range of 700 miles, but in conventional cruising may travel 2000 miles.

The Navy also has a contract with the same company for the construction of a 15-ton hydrofoil test craft to investigate very high speed submerged hydrofoil systems. This craft is scheduled to be completed and delivered to the Navy late this year.

You'll Find Retirees All Over the World

Ever wonder where most old sailors go when they retire? According to the records, the vast majority of them remain within the limits of the good old continental U. S.—apparently perfectly content to settle down after years of traveling.

Not all of them, however. More than 2900 Navy retirees are currently proving the exception to the rule—and, as you can see from the retirement check mailing list below, some of them have chosen some fairly exotic Shangri-las. All but a handful, of course, have headed for a half dozen easily understandable locations—Guam, Hawaii, the Philippines, Alaska, Japan and the Canal Zone—all of which contain large concentrations of U. S. government employees. But what, you may well be inclined to wonder (as do we), has taken some others to such spots as Pakistan, Finland, Luxembourg and Ethiopia. Not to mention Antarctica.

Ah well, with no further evidence at hand, we can but speculate. ALL HANDS, we're proud to say, reaches most every nook and cranny of the world sooner or later. Perhaps we'll be hearing from some of these roving retirees. If you should stop by some of these ports of call, drop in on the old sea dog. You might get a story.

Location	Checks	Location	Checks	Location	Checks
Alaska	86	England	26	Netherlands	4
Antarctica	1	Ethiopia	1	Newfoundland	4
American Samoa	47	Finland	1	New Zealand	12
Argentina	1	France	12	Norway	1
Australia	62	Germany	16	Pakistan	1
Azores	2	Guam	345	Peru	2
Bahamas	1	Haiti	1	Portugal	1
Belgium	1	Hawaii	724	Puerto Rico	65
Bermuda	11	Hong Kong	38	Sangley Point, P. I.	913
Brazil	2	Ireland	2		
Canada	46	Israel	1	Spain	28
Canal Zone	80	Italy	19	Subic Bay, P. I.	152
Chile	1	Japan	88	Sweden	1
Costa Rica	5	Korea	4	Switzerland	3
Cuba	23	Luxembourg	1	Taiwan	8
Cyprus	1	Malta	1	Trinidad, BWI	3
Dominican Republic	1	Marshall Islands	13	Turkey	3
		Mexico	29	Uruguay	1
Denmark	1	Midway Islands	2	Venezuela	1
Egypt	1	Morocco	6	Vietnam	2

GUN TOTER — USS *Newport News* (CA 148) can deliver big punch with her nine eight-inch/55s, 12 five-inch/38s and 24 three-inch/50s.

Sports Champs Make the Scene

The "good old summertime" is more than the title of a good old song. It's also a time when thousands of sailor sportsmen of varying sizes, shapes and shades of persuasion hit the great outdoors en masse.

We've heard of hundreds of fine individual and team performances in dozens of Navy sports over the past few months—far too many to list in detail here. To give you some inkling of the scope of the world-wide Navy recreation program, however, here is an account of just a few of them.

All-Navy Softball

At the All-Navy level, for example, the Seattle World's Fair formed a spectacular backdrop for the 1962 All-Navy softball tournament, hosted in mid-September by NAS Seattle. And even such a colorful extravaganza as the Fair failed to dim the luster of 20-year-old Seaman Joe Lynch. The fireballing right-hander from the submarine tender USS *Sperry* (AS 12) very nearly stole the whole show.

A six-two, 220-pound baby bull from Nashville, Tenn., Lynch hurled three successive shutouts and averaged two strikeouts per inning in leading the San Diego-based *Sperry*, representing the Pacific Coast region, to its four-game title sweep.

Lynch's amazing mound performance got underway in the tourney's very first game as he limited the hard-hitting SubLant crew to two singles, struck out 15, and put some added frosting on the cake with an enormous three-run homer of his own. It continued through the PacCoaster's second set-to as he three-hit SouthLant and whiffed 14, and wound up in the finale when he again paralyzed SubLant with a two-hitter and fanned 13.

Sidekick Jim Sperry tossed the winner's other shutout, a sparkling one-hit effort, sending 10 Potomac River Naval Command stickers down swinging in the process.

Complete tournament results:

First day

Pacific Coast (USS *Sperry*)—3
Atlantic Fleet (SUBLANT)—0
North Atlantic (PRNC)—2
Western Pacific (SUBPAC)—0
South Atlantic (NTC Bainbridge) —Bye

Second day (Rained out)

Third day

PacCoast—1
SouthLant—0
LantFlt—10
WestPac—0
PacCoast—3
NorthLant—0
LantFlt—5
SouthLant—1

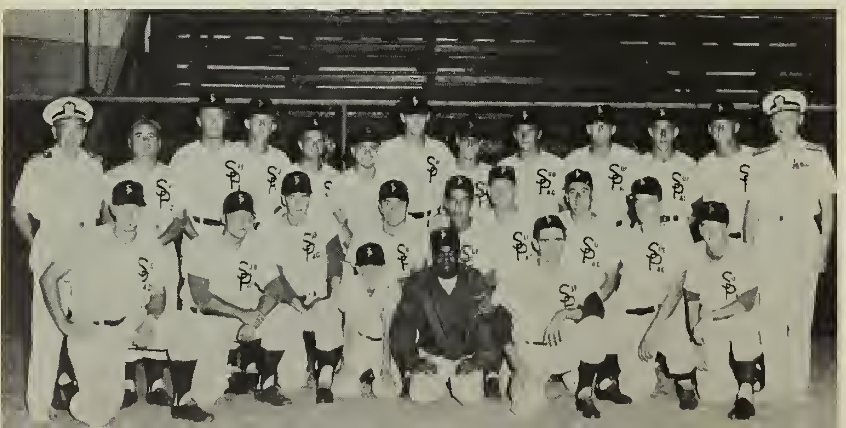
Fourth day

LantFlt—3
NorthLant—2
PacCoast—3
LantFlt—0

It was this selfsame pair—Lynch and Sperry—who combined forces to hurl AirPac to last year's All-Navy championship, and they were back bigger and better than ever this time around. The strong-armed duo's combined two-year All-Navy pitching log now shows: Eight games; 61 innings pitched; one run; 18 hits; 112 strikeouts.

While pitching, obviously, dominated the series, PacCoast showed some other bright lights too. The whole team fielded brilliantly—when they got the chance. Offensively, there was second-sacker Phil Crandall, the blazing-fast, switch-hitting lead-off man, who batted .333, reached base nine times in four games, and scored six of his team's 11 runs; third baseman George Giles, another heavy sticker at .333, and veteran outfielder Doc Derryberry, whose clutch hits drove in the winning runs in two of his club's triumphs.

CHAMPIONS AGAIN — SubPac Raiders display victory smiles after winning third straight Hawaii Interservice Baseball League title.



Pistol Champ

At the National Rifle and Pistol Matches, staged annually at Camp Perry, Ohio, Aviation Machinist's Mate Second Class Donald L. Hamilton, USN, whanged away so effectively with a variety of sidearms he became the Navy's top pistol shooter. And in the process he came within a whisker of pulling the upset of the current U. S. marksmanship scene.

Army SGT William Blankenship, defending and two-time national champion from previous Camp Perry meets and acknowledged to be one of the world's top pistol shots, won his third straight national title—but not before Navyman Hamilton had given him the battle of his shooting life. It was only after the last string was fired and the targets scored that the sergeant was declared winner, and then only by the x-ring count. Both had racked up identical 2633 scores, but SGT Blankenship had put 128 shots into the tiny x-ring inside the bull's-eye, while Hamilton had managed but 116 x's.

PO2 Hamilton, who serves at NAS South Weymouth, Mass., may have missed the big prize, but he still wound up with some very tangible rewards.

He broke the National Match record, for example, in both the .22-caliber timed fire and the .45-caliber timed fire categories, with scores of 200-17 and 200-14, respectively. He became the first recipient of the newly instituted Secretary of the Navy award—a .45-caliber pistol with interchangeable barrels and a gold trigger.

SubPac Wins Again

Out Pearl Harbor way, SubPac, like ol' man river, just kept rolling along.

Manager Herb Frantz's pinstripe-clad Raiders, possessors of a proud

Navy baseball record stretching clear back to the 1920's, racked up their third straight Hawaii Interservice Baseball League title (and their umpteenth over the years) with an over-all league record of 46-9.

The Raiders then lambasted the civilian league pennant-winning Asahi club three games to one in a best three out of five series to reign, once again, as champions of 50th state baseball. Slick lefty Walt Haun, who had earlier posted an 18-3 Interservice League won-lost mark, twice threw shutouts at the bedazzled Asahis in the title series.

SubPac departed Hawaii shortly after the final out for a two-week goodwill tour in Japan. They were slated to play a series of games against some of Japan's top amateur, industrial and semi-pro teams.

Challenge Shield

In Hong Kong the CruDesPac destroyer uss *Black* (DD 666), currently serving as U. S. Navy station ship at that British Crown Colony, became the first winner of a new Challenge Shield, presented to the victor in any and all athletic events staged between the U. S. station ship and its British counterpart, HMS *Tamar*.

Black gained first possession of the new award by downing *Tamar*, 69-48 in a swimming match. Ensign Jim Guthrie, USN, a former Yale University tank star, led his ship to victory with winning performances in both the 100- and 200-yard freestyle races and the 25-yard butterfly event. And not about to be outdone by his troops, *Black's* skipper, CDR Robert E. Bondy, Jr., got into the act by winning a special veteran's handicap race.

Skeet Meet

A five-man Department of the Navy skeet team, paced by the dead-eye antics of 20-year-old Seaman Ken Sedlecky, took on nearly 500 of the world's top shotgunners in the World Skeet Championships at Montreal, Canada, and posted some shining individual and team performances.

Young Sedlecky, who's been shattering clay pigeons with near-monotonous regularity since he was a precocious knee-high to a 20-gauge, won the International Style Skeet match, breaking 100 consecutive birds, and placed a remarkable fourth in the Champion of Champions event. He then joined Chief Aviation Ordnanceman Allen Buntrock to cop a pair of two-man team matches—the 410-gauge with a 195x200 score, and the 20-gauge with a 199x200 showing.

On his own, Chief Buntrock achieved runner-up honors in the 410-gauge match, and won the Class AA High Over-all (four guns) title with a 544x550 total. CAPT Paul Pugh, O-in-C of the team, captured the Class A 12-gauge title with a 249x250, and teamed with CDR R. Livingston to win the two-man Class A 12-gauge event with 497x500.

The Navy squad also racked up runner-up finishes in four different five-man team events (Chief Aviation Electrician's Mate Ken Pendergras was the fifth member of the Navy quintet), during which they set a *new world's record* for long run without a miss by a five-man military team—scoring 543 consecutive hits.

Their Montreal achievements were only the latest in a long string of championship efforts by the Department of the Navy gunners this year. Earlier, for example, they won the five-man team title at the Inter-American Championships at San Juan, Puerto Rico, and both the five-man open and five-man military titles in the Pan-American championships. They posted new match records in all three events.

Billfish Tournament

LCDR G. Leo Brown, USN, led his Pearl Harbor Naval Station team to a first place finish in the Fourth Annual Hawaiian International Billfish Tournament by boating an 804-pound Pacific blue marlin.

LCDR Brown, who is CO of the U. S. Naval Reserve Training Center, Honolulu, hooked his prize catch (largest in the history of the tournament) while fishing from NavSta Pearl Harbor's recreation boat *Kaimakani*.

Softball Again

Other ships, too, besides *Sperry*, did right well on the softball front.

The repair ship uss *Ajax* (AR 6) knocked off two strong shore-based clubs to win the 1962 Commander Naval Forces Japan tournament at NAS Atsugi.

The Spartans got off on the wrong foot by dropping their first game to the Naval Security Group Kami Seya Sparks by a 3-1 count. They rebounded strongly, however, behind the masterful twirling of Patternmaker Third Class Ernie Robinson, who pitched all four games, to shade NAS Atsugi, 1-0, and down Kami Seya in a final-day double-header by 5-0 and 7-5 scores.

USS *James C. Owens* (DD 776), meanwhile, tore up the majority of its East Coast opposition for a fine, regular season 38-4 won-lost record. Along the way they won the Charleston Naval Base league title with an unblemished 23-0 mark, and copped the Charleston-Mayport-Key West area championship by upending the cruiser uss *Huntington* (CL 107) two straight, in a best two out of three series.

Not content with all of this, the destroyermen then journeyed to Newport, R. I., where they battled their way to the finals of the CruDesLant play-offs before dropping a heartbreaking 13-inning decision to the Norfolk All-Stars.

SOFTBALL PITCHER Vern Southerland, YN2, and CO and XO of USS *James C. Owens* (DD 776) pose with trophies the DD won this year.

SERVICESCOPE

Brief news items about other branches of the armed services

A PROGRAM GEARED for the development of balloons which can remain aloft in the fringes of space for several weeks or more has been lofted into action by the Air Force research laboratories in Cambridge, Mass. The problem: The Air Force needs relatively inexpensive balloons which can support scientific probes near the edge of space.

A development test conducted last summer exemplifies what the Air Force is doing in its search for sturdy, high-flying gasbags. A 34-foot diameter balloon made of a tough, plastic material was eased to an altitude of 68,000 feet and remained there for 19 days before scientists ended its jaunt by radio commands from earth.

The balloon, launched at Kindley Air Force Base in Bermuda, covered 9300 miles while aloft. Its route took it from Bermuda, south of Florida, north of Mexico City, then across the Pacific to Hawaii and its cut-down point near Iwo Jima.

The balloon was kept under constant surveillance with the help of radio transmitters monitored by scientists at key ground stations. The payload contained performance-monitoring instruments and a variety of radio gear which included the command receiver to trigger the cut-down signal.

The success of the flight has opened the way for tests of larger balloons at even higher altitudes.

★ ★ ★

ARMY MAAGS AND MISSIONS now fly the new Army field flag.

The flag is blue, three feet wide and four feet long, with the Department of the Army seal in white. A white scroll under the seal will bear the inscription "United States Army." The date "1775" appears below the scroll.

The design is like that used on the official Army flag except the colors are reversed. The Army field flag will be used by MAAG missions and other organizations not authorized to fly the Army flag.

The new flag is the second ranking Army flag.

NO PICNIC — An Army Ranger lectures on survival in an unusual 'classroom' at ranger camp in Florida.

COMING UP — Drawing shows gas turbine-powered, 372-foot rescue cutter Coast Guard plans to build in '64.

THE DEPARTMENT OF DEFENSE has begun construction of the $700,000 Cumberland Plateau Seismological Observatory located on a 9200-acre site about 12 miles south of McMinnville, Tenn.

When the observatory is completed this fall, it will be operated by the Air Force.

The new installation will be part of a system of four seismological observatories. The first was completed in 1960 and is located in the Wichita Mountains at Fort Sill, Okla.

The Cumberland Plateau Observatory will be similar to the Wichita Mountains Observatory. It will have 21 seismometers located in watertight vaults covered by about two feet of earth.

Ten of the seismometers will be arranged in a geometrical pattern suitable for detecting underground nuclear explosions. All will be monitored by the observatory's amplification and recording equipment.

A staff of six will man the observatory—a station manager, station engineer, three data analysts and a station technician.

Similar observatories are being built in Oregon and Utah. The entire system will cost approximately 2.1 million dollars.

★ ★ ★

ARMY EXPERIMENTS with those everyday coatings known as paint have resulted in two new developments. Scientists at the Engineer Research and Development Laboratories in Fort Belvoir, Va., have come up with an "organic stripper" which can remove paint or enamel from any type of surface within four to five minutes, and a green camouflage paint which reflects a high percentage of the sun's radiation.

The "stripper," which contains detergent emulsifiers, is considered superior to any type of paint remover now available. It softens the paint or enamel film, then releases a gas which lifts the film from the surface. The loosened, partially dissolved paint film is then flushed off with water. The stripper is nonflammable, and can be applied to any surface by brush or spray.

The new paint was developed after experiments with special green pigments. It can be used to camouflage Army missiles, which in the past have been painted white to prevent excessive absorption of solar energy which could overheat the delicate instruments.

THE AIR FORCE is establishing a basic research laboratory at its Academy near Colorado Springs, Colo.

It will be the first such installation to be established at a service academy.

The proposed laboratory will make use of research equipment already at the Academy and will serve a dual purpose. It will increase the Air Force's ability to conduct basic research programs and will provide a means for selected members of the Academy's faculty and outstanding air cadets to collaborate in Air Force research programs.

The staff at the laboratory will include 15 scientists, two research assistants and four administrators.

★ ★ ★

THE ARMY HAS RECEIVED the first model of a new more-punch-per-pound generation of self-propelled artillery. It is the M-107, a 175mm "Long Tom" weighing just under 30 tons.

Another new self-propelled weapon, the eight-inch M-110 howitzer, is being produced on an adjoining production line of the company that delivered the M-107.

The M-107 has a 30-foot barrel capable of accurately firing a shell more than 20 miles. It replaces the M-55 self-propelled 155mm gun, which weighs about the same, but delivers a much lighter projectile only half as far.

A triple-purpose vehicle can carry either the M-107 or the M-110, or be used as an armored wrecker. When the gun is fired, a locking device eliminates spring in the vehicle's tracks, in effect converting them to solid platforms which transmit the recoil force directly into the ground. Thus, the weight of the vehicle can be cut almost in half without interfering with the action of the gun.

The gun control system uses recoil energy to adjust the tube and power loading devices, saving wear on the vehicle's battery.

Diesel engines used with the M-107 and M-110 are capable of cruising 450 miles without refueling their 300-gallon tanks. A gasoline-powered model would require 450 gallons of fuel for the same distance.

Transportable in a C-133 aircraft, the M-107 and M-110 have a top speed of 34 miles per hour, can climb a 60 per cent grade, cross over seven-foot trenches, and roll over vertical obstacles up to 40 inches in height.

★ ★ ★

A SMALL, COMPACT MAGNETO requiring no spare parts or maintenance is currently being tested by the U.S. Army. Unlike the conventional magneto, which is designed for repair parts replacement, the new one is a throwaway type.

It is expected to simplify logistics by eliminating complicated cataloging and supply of repair parts, as well as bulky and expensive support equipment and tools. Replacing the entire assembly, using the unitized magneto, has been found to be less costly and time-consuming than replacing parts in the conventional model. In addition, little or no training of maintenance personnel is required.

The new magneto weighs three and three-quarter pounds; occupies 45.0 cubic inches and costs less than $16. The earlier type magneto weighs nine and one-half pounds, occupies 78.5 cubic inches and costs $32.

ARCTIC AND ANTARCTIC expeditions have always been troubled by snowfall that buries campsites and shrinks snow tunnels. But at Camp Century on the Greenland icecap, the Army is working on the problem.

The U.S. Army Engineers are testing a snow trimming machine, built to scrape new-fallen snow from the top of buildings and snow tunnels.

Consisting of a trimmer head mounted on a self-propelled platform, it runs on a track attached to the roofs of buildings. The track is aluminum and designed to guide, support, and hold down the trimmer.

At the same time, the Army is testing a machine that will crush blocks of snow removed by the trimmer, and put the dry, crumbled snow on a pneumatic conveyor system that will take it outside the camp. The conveyor has been under test since last summer.

★ ★ ★

THE ARMY SIGNAL CORPS is making plans for a powerful broadcasting system designed to be airlifted by helicopter. The system—virtually a miniature radio studio—could be landed anywhere in the world and go on the air in a matter of hours.

One of the transmitters will be a 50,000-watt standard broadcast unit, equal in power to the largest commercial radio station, with an area coverage up to 12,000 square miles. A second transmitter is of 50,000-watt short-wave design with a range up to 6000 miles.

A complete broadcasting system can be assembled and ready to broadcast within a few hours. One helicopter can carry a "heli-hut" which contains the broadcast gear. A typical hut may be about 12 feet in length, six feet wide and six feet high. It may weigh 4000 pounds, and can be carried by an H-37 helicopter on a 100-mile mission without refueling. Standard Army cargo planes and ground vehicles may also transport the broadcast huts.

The system can receive and monitor outside radio broadcasts, and tape or convert them for rebroadcast on either medium or short-wave equipment. It can also be used to originate programming, and could broadcast two different programs on two wave lengths to two separate audiences at the same time.

MOVING UP — Armored personnel carriers of the 28th Division move out with infantrymen during maneuvers.

Deep Freeze Can Be Fine Duty If You Like That Sort of Thing

WOULD YOU LIKE A TOUR of duty which promises to be interesting and adventurous, and which has some very tangible rewards to offer? If you would, and if you can qualify, Operation Deep Freeze 64 may well be the answer for you.

Operation Deep Freeze, of course, is the code name for the Navy's support of the U. S. Antarctic Research Program. Volunteers are now being sought for next year's program. The best qualified will be selected in early 1963 for deployment about September 1963. Summer support personnel will return to CONUS about March 1964, whereas those selected to winter-over will remain in Antarctica until approximately November 1964.

Those rewards we mentioned above? Well, in addition to the personal satisfaction to be gained through receiving and completing a challenging assignment, and through the sharing of an experience incomparable to any other Navy assignment, two specific rewards are offered.

The Antarctic Service Medal is awarded for Deep Freeze duty. In addition, if you winter-over, every effort is made to assign you to duty in an area of your choice when you return. The Navymen returning from a year in the Antarctic late this fall, for example, are all being assigned to their first-choice area.

You may, if qualified, volunteer for duty with either of the two units—Antarctic Support Activities or Air Development Squadron Six (VX 6)—which venture south each year.

For duty with Antarctic Support Activities, the following grades and designators, with qualifications as indicated, are required for the winter-over party:

13XX CDR (Commanding Officer)

1530/13XX LCDR and below, aerological experience

13XX LCDR or LT, ground control approach experience

11XX LT and below, communications experience

21XX LCDR or LT, including flight surgeon

22XX LT

31XX LCDR and below

41XX LCDR and below

51XX LCDR and below

849X

798X

The following enlisted ratings are required for the winter-over party: ET, RM, YN, PN, SK, DK, CS, SH, SH-3122, EM, IC, EN, DC, SF, CE, CM, EO, BU, SW, UT, CN, AG, AB, PH, HM, DT, MR.

For duty with Air Development Squadron Six, the following grades and designators, with experience indicated, are required:

13XX CDR and below, experience in R7V, R4D-8, HUS, P2V, R3Y or C-130

135X LT and below, experienced aerial navigators

31XX LCDR and below

711X

741X

831X

The following enlisted ratings are required: RM, JO, AM, AME, AMH,

WHAT'S IN A NAME

Ships Named Bainbridge

Ships named *Bainbridge* have been in and out of the Navy for the past 120 years. All but one have been members of the destroyer family.

Destroyers named *Bainbridge* served during 44 of the 60 years that DDs have been part of the Navy. All are prominent in Navy history.

The first ship listed as a destroyer was *Bainbridge* (DD 1).

Forty years ago another *Bainbridge* (DD 246) made history for her rescue of 500 persons from a burning transport.

The Navy's first nuclear-powered guided missile frigate has been commissioned *Bainbridge* (DLGN 25).

Commodore William Bainbridge, the man after whom these ships were named, was born in Princeton, N. J., on 7 May 1774. At the age of 24 he entered the Navy as lieutenant.

Commodore Bainbridge distinguished himself during the War with France. He was in command of the frigate *Philadelphia*, when, in December 1803, she was captured in the harbor of Tripoli, where he was held prisoner until June 1805. The commodore commanded *Constitution* during the War of 1812. Between 1824 and 1827 he served as Navy Commissioner.

The first ship commissioned *Bainbridge* was a 12-gun, 100-foot brig which served from December 1842 until August 1863.

The first destroyer named *Bainbridge* was commissioned on 24 Nov 1902. She was decommissioned in 1919.

The second destroyer named *Bainbridge* (DD 246) was commissioned on 9 Feb 1921. It is this ship which was responsible for the rescue of approximately 500 people from the burning French transport *Vinh-Long* in 1922. She served in World War II and was sold by the Navy in November 1945.

The latest USS *Bainbridge* was put in commission this summer. Her designation is nuclear-powered guided missile frigate (DLGN 25). Vital statistics of the new *Bainbridge* are as follows: Displacement, 6500 tons (standard); length, 564 feet; beam, 58 feet; armament, Terrier guided missiles and Asroc antisubmarine weapons, plus two 3-inch antiaircraft guns and six torpedo tubes.

YN, PN, SK, DK, CS, AN, AB, AK, PR, PH, HM, TN, AD, ADJ, ADR, ADH, AT, SD, ATN, ATR, AE, AEI, AEM, AMS, DT.

To get Antarctic duty with Operation Deep Freeze, you must:

- Be a volunteer.
- Be recommended by your commanding officer on the basis of performance, technical skill, resourcefulness, versatility and interest.
- Have at least 24 months' obligated service or agree to extend in order to have the specified obligated service. Naval Reservists and Navymen who will be eligible for transfer to the Fleet Reserve must agree to remain on active duty for 24 months. Medical officers should have at least 24 months' obligated service or agree to extend.
- Have a clear record, reflecting sound moral character and professional dedication. You must have no past or pending domestic problems or indebtedness.
- Meet necessarily rigid physical requirements. The objective is to procure and retain Navymen physically qualified and temperamentally adaptable to the rigorous conditions of Antarctic service, and to exclude those who are likely to require repeated or prolonged medical attention, or who will not be able to perform at full capacity in the normal scope of their employment. You must meet the physical standards for entrance into the naval service as listed in Chapter 15 of the *Manual of the Medical Department*, plus some additional requirements listed in Enclosure (1) to BuPers Notice 1300 of 11 Sep 1962.

New Travel Pay Tables May Make Some Changes In Your POV Plans

Here's a quickie quiz for you. How far is it from, say, Norfolk, Va., to San Francisco, Calif.?

The answer? Well, it all depends.

As the crow flies, we're not sure. If you're talking about the railroad distance, it's very nearly 3250 miles. By car, however, it's only 2990 miles. And, since the Department of Defense has no interest whatsoever in crows, but is extremely interested in cutting down on travel expenses for the military, mileage differentials such as the one above have become mighty important to all of us. If you prefer to drive your own car when you shift from one duty station to another, it is going to cost you some travel money from here on in.

All-Navy Cartoon Contest
LT Paul B. Kincade, USN

"When my father promised me a world cruise and complete wardrobe as a graduation present, I never dreamed he meant . . ."

Here's what has happened. Beginning with fiscal 1963 (1 Jul 1962) DOD has decided to compute all permanent change of station, TAD, and other mileage claims, when a privately owned vehicle is used, on the official highway mileage rather than the "common carrier"—usually railroad—distances.

For an idea of just how much less money this can mean to you if you employ a POV on your next transfer, let's take the example of a sailor with a wife, three children (ages 13, 10 and 8) and a set of orders transferring him from Norfolk to a San Francisco-based ship.

Before 1 July this family, making the cross-country trek in their own car, would have collected a combined total of $777.12 in travel money—a figure arrived at by multiplying 24 cents per mile (the sailor's six cents, the wife's six cents, the 13-year-old child's six cents, plus the three cents each per mile allowed the younger two children) by 3238 miles, which was the official distance. Under the new DOD rules, however, this same family would now receive $717.60 (24 cents per mile times 2990 miles) or some $60 less than before.

If you're single, you could have made the Norfolk to San Francisco trip in your POV before 1 July and been paid $194.28 in travel allowance. Now, for the same drive, you'd receive $179.40—or about $15 less.

These new mileage tables apply to all active duty personnel changing station on orders. They *do not* apply if you are going home from active duty, whether you are retiring, resigning, being released, going to the Fleet Reserve, being discharged, or are being severed from the service.

The new rule says, in a nutshell, that if you are in a duty status upon completion of travel, you will be paid under highway tables if you travel by private car. If you are not in a duty status at the end of your trip, you will receive travel compensation based on the common carrier mileage in all cases.

In nearly all cases, highway distances are shorter than common carrier mileage—from Boston to San Diego, for example, the cut is 384 miles. There are a few minor increases, but in most instances they affect relatively short hauls.

There's another loss involved too, but this one concerns travel time rather than money. Travel time is figured on the basis of 250 miles per day when traveling in a POV. Thus, the sailor making the Norfolk to San Francisco drive now would be allowed 12 days travel time, instead of the 13 days previously granted.

Alnav 17, recently circulated, served notice of the new rules, and let disbursing officers know how to handle mileage claims under them. It also discussed their effect upon both POV and common carrier travel between CONUS and Alaska and Newfoundland.

Correspondence Courses Range From ASW to Communications

The Naval Correspondence Course Center has made available six new correspondence courses, two officer and four enlisted. Two have been discontinued. They are *Signalman 3* (NavPers 91290-A) and *Signalman 2* (NavPers 91291-A), which have been combined in the new *Signalman 3 and 2* (NavPers 91291-B). The other new courses are:

Course	NavPers No.
OCC The Antisubmarine Officer	10405
OCC Naval Control of Shipping	10413
ECC Communications Technician "A" 3 and 2	91558
ECC Sonarman 1 and C	91265
ECC Communications Technician "T" 3 and 2	91559

Retirement Will Require a Bit of Foresight on Your Part

IF YOU'RE A REGULAR NAVY officer, commissioned or warrant, who's making plans for voluntary retirement, here's a tip from the Bureau branch that handles retirement matters: Read the official directives on the subject before you submit your request. They may contain some fine-print factors you are not aware of.

In the past, some officers neglected to read the official word before requesting retirement. One result has been a number of retirements disapproved because of ineligibility. The officers concerned would have known they were ineligible had they taken the trouble to find out.

The ground rules for the voluntary retirement of commissioned and warrant officers of the Regular Navy are laid down in SecNav Inst. 1811.3D. BuPers Inst. 1811.1B goes into more detail, and lists the various laws on which retirements are based. Both directives are brief and easy to read.

Eligibility

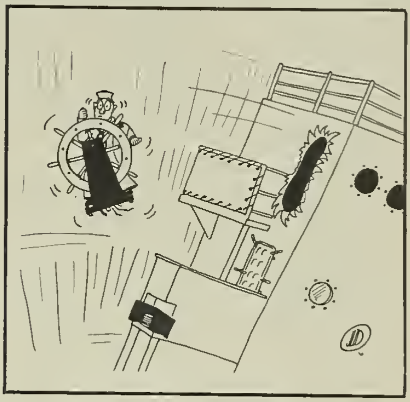
TWENTY YEARS of completed active duty is the main eligibility requirement for your voluntary retirement. All *active* duty, including active duty for training, as a commissioned officer, warrant officer, enlisted man or aviation cadet (appointed or enlisted), in the Navy, Marine Corps, Army, Air Force or Coast Guard, or in Reserve components, is creditable. Time spent on inactive duty as a Reservist does not count toward the 20 years.

As a general rule, the retirement eligibility policy outlined in SecNav Inst. 1811.3D will apply. But, you do not automatically have an indisputable right to retire at any time you choose, simply because you've completed 20 years of active duty. Your retirement may be delayed for some time, depending on the circumstances.

A delay may be encountered if you are in a key billet that can't be filled by someone else at the drop of your hat, or if you have special skills or background the Navy needs. And, if you have received transfer orders or are under a payback obligation, you can expect your request for retirement to be deferred until you complete your normal tour of duty or satisfy any service obligations.

In any such case, an effective date later than the one you requested will be specified by the Secretary of the Navy.

All-Navy Cartoon Contest
John L. Draves, QM2, USN



"Stand by for heavy rolls."

Favorable Consideration

ALTHOUGH A MAJORITY of retirement requests are considered on the basis of service needs, you should expect almost automatic approval if you are in one of the following categories:

- Other than flag officer with 30 years of active service.
- Flag officer with 30 years of active service and at least five years as flag officer.
- Captain with at least two years' service in grade.
- Officer who has twice failed selection for promotion.
- Officer whose assignability is limited. (Over-age in grade, deteriorated health, etc.)
- Officer who has hardships of compassionate or unusual financial nature which would definitely be alleviated by retirement.

Otherwise, your retirement request will be considered solely on the basis of service needs. Final approval rests with the Secretary of the Navy.

Your Request

IF YOU QUALIFY for voluntary retirement under the provisions of SecNav Inst. 1811.3D and BuPers Inst. 1811.1B, you may submit your request to the Secretary of the Navy via your chain of command and the Chief of Naval Personnel. Your request should be submitted at least three months in advance of the desired date of retirement to allow plenty of time for processing. If a contact relief is required, your request should be submitted six months in advance.

Don't submit your request for voluntary retirement contingent on some other administrative procedure, such as the action of a continuation board. It will serve only to confuse the issue and delay processing.

All retirements (except for disability) become effective on the first day of the month.

Sample wording for your request is contained in BuPers Inst. 1811.1B. When your CO affixes his endorsement, he will express your command's position with regard to a relief or any other factors that mean orderly retirement from the command standpoint.

Your request is forwarded to the Active Non-Disability Retirement Branch of this Bureau (Pers B85), which notifies the detail officer responsible for your case. This officer first reviews your record to make sure you are eligible. (The Officer Records Section of the Bureau provides a statement of your service.)

After the review, the Retirement Branch recommends that your request be processed for a specific retirement date. You are informed by letter that your request is being processed for that date, and why. An endorsement for the Chief of Naval Personnel is prepared, and your request is routed to SecNav for final approval.

The Physical

YOU SHOULD NOTE that your request cannot be forwarded to SecNav until you are eligible in all respects, which includes submission of a report of physical examination. It is important that you receive a complete physical far enough in advance to permit correction of minor physical defects, or, if major defects are found, to permit completion of disability retirement proceedings before the retirement date otherwise scheduled. However, the exam must be conducted within six months of the specified retirement date.

It's possible to be forced into statutory non-disability retirement while disability proceedings are still in progress. A number of procedures have been established to forestall the necessity of cancelling your voluntary retirement and afford you the opportunity to obtain disability retirement, if qualified, before your statutory retirement date.

Retirement Approved

WHEN THE CHIEF of Naval Personnel receives SecNav approval of your retirement, orders are cut showing the effective date, detachment date, laws under which retired and grade in which retirement is to be effected.

If you are outside the continental limits of the U. S., you will be ordered to the nearest continental port of debarkation for separation, unless you specifically request separation outside CONUS at your overseas duty station. If you're inside CONUS, you will probably be separated by the activity to which you are attached, or by the nearest activity capable of effecting separation.

You may be ordered for separation somewhere else only if you declare (by formal written statement to the Chief of Naval Personnel) it will be your final home of selection for retirement. To do this, the home you select must be within commutable distance of a naval activity which has facilities for making payments incident to separation and for conducting the separation physical exam. Small activities such as recruiting stations, Naval Reserve training centers, etc., are not considered suitable.

Any leave creditable (on the books) at the date you retire is compensable in a lump-sum payment not to exceed 60 days' basic pay and allowances. In other words, you will be paid for 60 days' leave; you lose any of your leave over that amount.

Using your accrued leave for "terminal" leave before you are detached from your last permanent duty station or from your separation activity is not authorized. If you continue on active duty after the date of retirement, the lump-sum leave payment will be made when you are finally released from active duty.

Your Retired Grade

AS A GENERAL RULE, you are retired in the grade in which you served at the time of retirement. However, if you had served in a higher grade previously, and the Secretary of the Navy determines your service in such grade was satisfactory, you will, before you retire, be advanced on the retired list to the higher grade.

Your pay account is closed out upon retirement and forwarded to the Navy Finance Center, Cleveland 14, Ohio. Any inquiry concerning your retired pay should be addressed directly to the Finance Center.

Unless you specify otherwise, the Finance Center will automatically continue to take care of all insurance allotments after your transfer to the retired list. Other allotments are stopped.

Your non-disability retired pay will be subject to income tax; the Finance Center will automatically withhold the tax.

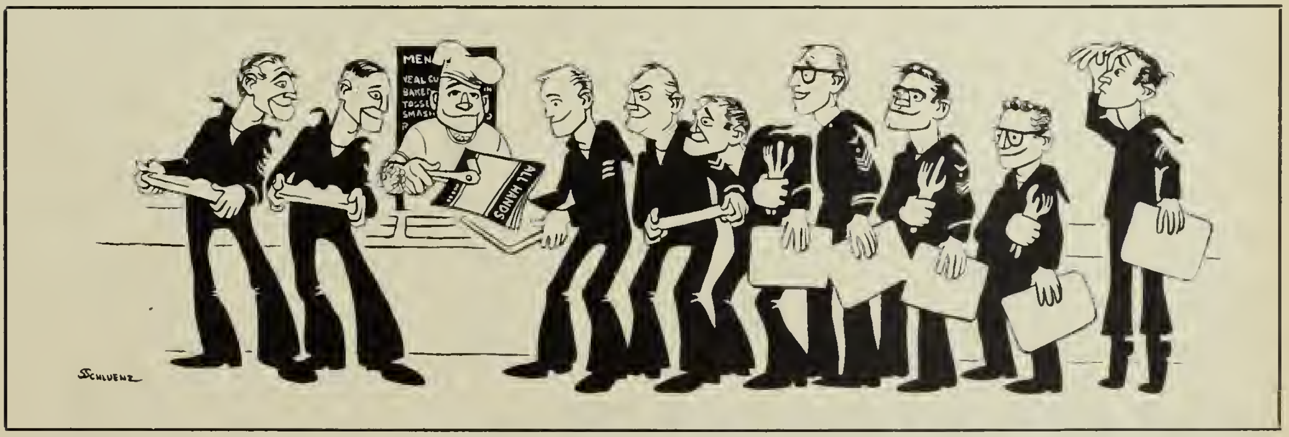
Computing Retired Pay

IF YOU VOLUNTARILY retire under laws cited in BuPers Inst. 1811.1B which require 30 or more years of active service, you will be entitled to retired pay at the rate of 75 per cent of the basic pay you received while on active duty in the grade in which you retire, or to which you are advanced on the retired list.

If you voluntarily retire under laws which require more than 20 but less than 30 years of active service (see BuPers Inst. 1811.1B), you will be entitled to retired pay at the rate of two and one-half per cent of the basic pay to which you would be entitled if serving on active duty in the grade in which retired (or to which you are advanced on the retired list) multiplied by the total of the following:

- Total years of service creditable for basic pay purposes as of 31 May 1958.
- Total years of active service, including active duty for training, performed after 31 May 1958.
- Years of constructive service credited for basic pay purposes, not included in total years of service creditable for basic pay purposes as of 31 May 1958. (This clause applies only to officers of the Medical and Dental Corps.)
- One day's credit for each retirement point earned as a member of a Reserve component after 31 May 1958 through authorized attendance at drills, periods of equivalent instruction or appropriate duty performed as authorized by a naval district commandant or the Chief of Naval Personnel, completion of correspondence courses, and the 15 points per year gratuitous credit for Reserve membership. (Maximum: 60 days' credit for any one year.)

In no case may retired pay exceed 75 per cent of the basic pay on which it is based. Warrant officers who retire under any law cited in BuPers



YOU TOO can serve your shipmates well — by passing this issue of ALL HANDS Magazine to nine others.

Inst. 1811.1B will receive retired pay based upon the applicable monthly basic pay of the grade in which retired, or to which advanced on the retired list, unless the basic pay of the grade to which advanced is less than that of any warrant grade satisfactorily held on active duty. In that case, the retired pay will be based on the higher basic pay.

The Final Move

You have one year from the date you retire (or one year from date of final detachment if continued on active duty after retirement) to complete travel to the home of your choice. Advance payment of mileage is not authorized; you must actually perform the travel to your selected home before you'll be reimbursed.

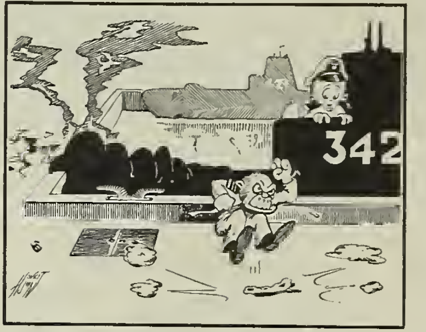
If you select a home outside the U. S., application should be submitted to an appropriate command with authority to provide overseas transportation.

Transportation of dependents and shipment of household effects to a place other than the home you select is not authorized. Your household goods may be turned over to a supply officer or carrier for shipment up to one year from date of retirement.

As a retired Navyman, you will be entitled to wear the prescribed uniform of the grade you hold on the retired list, when wearing the uniform is appropriate. You may use your military title in connection with commercial enterprises and you will be accorded privileges of available commissaries, small stores, officers clubs, and armed services exchanges.

You and your dependents may also receive hospitalization and inpatient and outpatient treatment at government medical facilities, if available. And, if space is available, you and your dependents may make one round trip each year on an MSTS ship, subject to payment of nominal charges.

All-Navy Cartoon Contest
John R. Thornton, SOG2, USN



"Does this mean my performance factor will drop, sir?"

You will also be subject to regulations prescribed by the Secretary of the Navy and the Uniform Code of Military Justice. You may be ordered to active duty in time of war or national emergency, but, in peacetime, may be called back only with your consent.

You will be prohibited from wearing your uniform in connection with non-military, personal or civilian enterprises, or activities of a business nature. If you reside in, or visit, a foreign country you should not wear your uniform except when attending, by formal invitation, ceremonies or social functions at which wearing your uniform is required by terms of the invitation, or by the regulations or customs of the country concerned.

Finally, you must report your address annually on 1 January to the commandant of the naval district in which you reside.

And Here's Some Special Advice for Warrants

Here's some behind-the-scenes retirement information for warrant officers:

- As of 1 Jul 1962, approximately 75 per cent of the men whose names appear on the warrant roster were eligible for retirement under Public Law 379, 83rd Congress, having completed at least 20 years of active service.
- You are not encouraged to retire short of the completion of 30 years. It may be to your advantage to stick it out.
- The W-4 receives a pay increase at the completion of 30 years, which naturally means a fatter retirement paycheck.
- Improvement is continuous in the rotation of warrant officers with respect to shorter tours at sea and better choice of shore billets for MACH, ELEC and BOSN.
- Warrant officers are no longer assigned ashore only to billets which were identified as "warrant" billets.
- You may be assigned to any shore billet in which you are qualified to serve by virtue of your technical specialty or maturity and experience.

Cold War Injury May Earn Purple Heart

Broadened conditions for award of the Purple Heart are now in effect. They cover cold war situations and instances in which United States armed forces personnel are serving with a friendly power.

Briefly, anyone serving under competent authority who is wounded, killed outright or subsequently dies of wounds received as the result of the hostile act of a foreign power against the United States is entitled to the award of the Purple Heart.

This also includes U. S. military or naval personnel serving with the armed forces of a friendly nation in armed conflict in which the United States is not a belligerent.

The first award of the Purple Heart will be in the form of a medal. Subsequent awards will be worn as gold stars on the medal or ribbon.

Posthumous award of the Purple Heart was made automatically to the next of kin of those who qualified between 5 Apr 1917 and 6 Dec 1941.

Posthumous award for wounds received on or after 7 Dec 1941 is made to the next of kin upon their application to the Chief of Naval Personnel or the Commandant of the Marine Corps, whichever is appropriate.

Change Six to SecNav Inst. 1650.1A contains full details on the new conditions under which the Purple Heart is awarded.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; BuPers Instructions and Notices apply to all ships and stations.

Instructions

No. 1120.15E—Discusses the eligibility requirements and processing procedures whereby qualified men and women on active duty may seek permanent or temporary appointment to commissioned status in the various sections of the Medical Service Corps.

No. 1120.34—Prescribes policies and procedures whereby eligible officers may request transfer to the Army, Air Force, Marine Corps or Coast Guard.

No. 1510.69F—Solicits applications and outlines eligibility requirements and procedures whereby qualified Navy enlisted personnel may apply for assignment to the NESEP program.

Notices

No. 1300 (11 September)—Solicited volunteers to participate in the Navy's support of the U. S. Antarctic research program in 1963-64.

No. 1120 (27 September)—Announced the selection of personnel recommended for appointment to the grade of ensign, Medical Service Corps.

Requirements Changed for Transfer of Line Officers

Eligibility requirements for unrestricted line officers' transfer to the Supply or Civil Engineer Corps have been changed somewhat for fiscal year 1963.

In effect, the changes update BuPers Inst. 1210.11, which listed the eligibility requirements for fiscal year 1962.

The original instruction outlines qualifications for transferring, to the Supply or Civil Engineer Corps, unrestricted line officers whose physical qualifications for line duty are marginal.

For Supply Corps officers, the date of rank for eligibles has been advanced from 1 Nov 1958 to 1 Aug 1959, and applicants must be junior to lineal number 45061-00 in the 1962 Officers' Register instead of 42372-10, as was the case in fiscal year 1962.

For officers interested in transfer to the Civil Engineer Corps, the maximum rank limitation has been lowered from lieutenant commander to lieutenant. Although the date of rank remains 1 Aug 1959, applicants must be junior to lineal number 45061-00 in the 1962 Officers' Register.

The new eligibility requirements became effective on 1 October of this year.

HOW DID IT START

Torpedomen Get a Bang Out of These

According to present-day definitions of a torpedo (a self-propelled underwater weapon that carries a high-explosive charge), and by stretching a point, one of its ancestors might be the floating kegs launched by David Bushnell during the Revolutionary War.

Acting on the theory that an explosion beside the hull of a ship would have greater power than the same explosion above the water line, Bushnell made up a number of powder kegs and launched them in the Delaware River to float down on the British fleet. His theory was sound, but the application faulty. The kegs did no physical damage because Bushnell hadn't properly considered the effect of the tides. (His venture shattered British morale for a time, however.)

About the only similarity between these floating kegs and torpedoes as we know them today is the name. By today's standards, they more appropriately should have been called mines.

About 1800, for example, Robert Fulton added to the development of a workable torpedo by packing black powder into wooden boxes. Rather than depend on the tides, Fulton designed his torpedo to be towed into contact with an enemy ship. Each powder box was equipped with a firing lanyard.

Later, several improvements were made on the Fulton torpedo by Frederick Harvey. Harvey added a firing lever. When the torpedo struck the hull of the target ship, the lever drove a firing pin into a detonator, which in turn exploded the main charge.

Just before the Civil War the spar torpedo was developed. This torpedo was in a class by itself. It neither floated nor was towed. It was a powder package mounted on the end of a long spar that projected from the bow of a torpedo boat. Although crude by today's standards, this spar torpedo sank two large ships during the Civil War.

Credit for the first self-propelled torpedo, and consequently the first real torpedo as we know them today, goes to Captain Lupius, of the Austrian navy. He worked out his idea while the Civil War was being fought, but lacked the mechanical aptitude actually to build the torpedo. This mechanical knowledge was provided by Robert Whitehead, a British engineer.

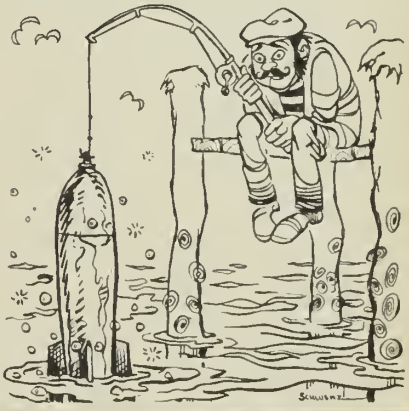
Captain Lupius took his plans to Whitehead in 1864 and, after two years of work, Whitehead produced a torpedo which was 14 inches in diameter and carried 18 pounds of dynamite. It was powered by a piston engine which operated on compressed air. It ran at six knots for about 100 yards.

By 1889 Whitehead had further developed his torpedo. It then carried 200 pounds of guncotton for 1000 yards at an average speed of about 28 knots.

The U. S. Navy began to experiment with the Whitehead torpedo in 1874. The air-steam torpedoes in use today aboard some destroyers and submarines are based on Whitehead's ideas.

Whitehead was not the only man to develop a torpedo during these early years:

- The Brennan torpedo, for example, was actually put into production in 1887 for the British Army. The torpedo itself had twin screws and a double shaft, but the power source remained ashore. On each shaft of the torpedo was a spool of piano wire which ran over a pulley at the top of the torpedo amidships, through a guide at the tail, and back to shore. As the wire was pulled off the spools, the torpedo's propellers turned.
- The Howell torpedo was powered by a 100-pound flywheel. The flywheel was spun by an engine on the firing ship and brought up to a speed of 150 revolutions per second immediately before the torpedo was fired.
- The Peck torpedo was powered by steam which was supplied to the torpedo's storage tank by a boiler aboard the firing ship.
- The Sims-Edison torpedo was powered by an electric motor. Current was supplied to the motor from a dynamo on ship or ashore through a cable that could be paid out to 4500 yards.



Kodiak Duty Isn't So Bad, Say Those Who Have Been There

KODIAK ISN'T AS BAD as you've been led to believe. Rumors to the contrary have undoubtedly been inspired by rival Chambers of Commerce. Such, at least, are the claims of Kodiak enthusiasts. That relatively small group insists that "this beautiful little island with its rugged mountain scenery is warmed by the Japanese Current, which is enough to give it the reputation of being the 'banana belt' of Alaska." The winter climate is less severe than that of Illinois, they say, and the summer season is very pleasant.

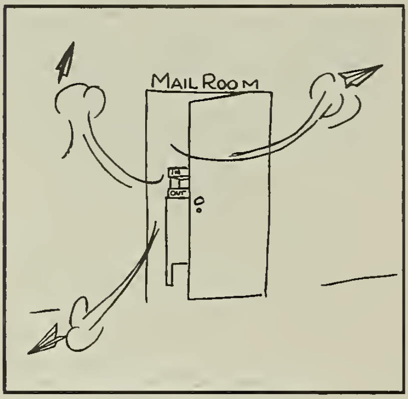
We can't give a firsthand account of the Kodiak attractions because we haven't been there, but here's the picture according to the PIO of the 17th Naval District:

The City of Kodiak is located seven miles from the Naval Station and has a population of about 4000. There are several small department stores, grocery stores, restaurants, dress shops, beauty parlors, mail order catalogue sales office, furniture store, theater, bank, small hotel and sundry other establishments such as garages, bars and variety shops. The principal industry is fishing. Prices are comparatively reasonable and average approximately 25 per cent above stateside prices because of freight costs.

Climate—The climate in Kodiak is comparable to that of the Puget Sound area in northwestern Washington State. The temperature ranges from a winter low of about —7° to a summer high of about 80°. Average winter temperature is 34° and summer 52°. The most difficult feature is the occasional storms with high winds sometimes called "williwaws." From November to April the hours of darkness are longer, with rain, snow and fog plentiful. Because of the rain (60 inches yearly average) and frequent moderate temperature, the snow does not generally accumulate in the living areas but does remain in the surrounding mountains. During the four-month summer, the hills are green and flowers are in abundance everywhere.

Tour of Duty—The overseas tour length for personnel permanently located in Kodiak is 24 months with dependents; 12 months for all others.

All-Navy Cartoon Contest
David E. Dunlap, YN2, USN



"Waddaya mean, air mail?"

Entry Approval for Dependents and Concurrent Travel—Entry approval and concurrent travel of dependents are controlled by the Commandant, 17th Naval District. Entry approval and dependent travel are not authorized until government housing on the naval station or approved housing in the city of Kodiak is available. Personnel who desire to request concurrent travel and entry approval into the 17th Naval District for their dependents, are advised to have a speedletter or message sent to the Commandant, 17th Naval District, Box 14, Navy #127, ℅ Postmaster, Seattle, Washington, or official Navy message to COM17.

The following information must be furnished:

- Name, rank/rate, file/service number.
- Authority for transfer.
- Duty station to which ordered.
- Number of dependents; sex and age of dependent children.
- Number of bedrooms desired.
- Estimated date of arrival at Seattle (port of embarkation).
- Request for permission to ship household effects.
- Request for government housing. If government housing is not available, state whether you agree to accept housing in the Aleutian Homes Project. (Information on housing is outlined elsewhere.)

If you are assigned on-base housing, an information circular on the type of housing assigned you will be forwarded via airmail after entry approval message is sent. From this, you can determine which household effects to ship and which to place in stateside storage.

Upon receipt of authority for entry and approval for concurrent travel of dependents, you must submit an original and five copies of DD Form 884, together with six certified copies of orders, to the Commandant, 13th Naval District (Code 114). In addition, forward one copy of DD Form 884 and one certified copy of orders to the Commandant, 17th Naval District (Code 10).

Because of the high cost of living in Seattle, dependents should not plan to arrive there until notified that entry into the 17th Naval District is authorized. Authorities in Seattle (Com 13) will not embark dependents until they receive authorization for entry from Com 17. If you don't want to bring your dependents, you are entitled to move them and your household effects to a place designated by you in accordance with *Joint Travel Regulations.*

Government Transportation—Most military personnel travel to and from Kodiak by government air. Travel for dependents from Seattle to Kodiak is controlled by Com 13. He will decide the mode of transportation to be used. If government transportation is not available, he will authorize commercial air. A nominal charge is made for subsistence while in transit. However, increasing numbers of military personnel and dependents travel by privately owned vehicle to and from Alaska via the Alcan Highway. Currently MV *Expansion* (a converted Army FS) runs between the mainland and Kodiak on a monthly schedule.

The Alaskan Steamship Company operates between Seward and Kodiak on a 21-day schedule. This schedule is subject to change without notice. All applications for shipment of privately owned vehicles from the mainland to Kodiak should be made at the Military Sea Transportation Service Office located at Building 5800, Command Building, Room 131, Elmendorf Air Force Base, Anchorage, Alaska. Further information concerning shipment of vehicles from the mainland to Kodiak can be obtained by writing to the Commanding Officer, MSTS Office, APO 942, ℅ Postmaster, Seattle, Wash.

Air Travel—Normally, luggage is limited to 65 pounds per person. The Chief of Naval Personnel may be requested to authorize excess allowance in basic orders.

Ship Travel—All ship travel to Kodiak has been discontinued; however, MSTS occasionally has a ship available on an unscheduled basis.

Household Effects—As soon as you receive your orders, you should contact the Household Effects section of the supply department at the nearest naval activity for information regarding shipment of privately owned automobile, personal effects and household goods.

(NavSandA Publication 380, entitled "It's Your Move!" contains the information you need.) Urgently needed items of household goods may be forwarded from your last duty station to the first port of embarkation (normally Seattle), thence your shipment is forwarded to Kodiak via commercial ship at government expense. This shipment should include necessities such as linens, silverware, china, kitchen utensils and other light equipment which you will need for housekeeping upon arrival, and should be shipped at least six weeks before your arrival in Seattle for transportation to Kodiak.

A limited amount of china, kitchen utensils and other essentials are available from Special Services while awaiting the arrival of the rest of your household effects. Washing machines and driers are no longer furnished in other than senior officer government quarters. Machines and electric clothes driers in good operating condition should be brought to Kodiak as repair facilities are very limited. A deep freeze is considered a desirable convenience. If you do not have one, they may be purchased from the Navy Exchange at Kodiak. An upright freezer should be considered since they occupy a lesser amount of floor space. There are no commercial storage facilities for household goods.

Government storage facilities are limited and are unsatisfactory for prolonged storage. Therefore, the type of housing you will occupy will determine which items to ship and which to place in storage. If you are going to live in station housing, the Navy will provide storage locations other than Kodiak for non-essential items at government expense. Apply to the nearest household effects shipping activity for the required forms.

Housing—All married officers, married enlisted men in pay grade E-4 with over four years of service and all personnel in higher pay grades are eligible for government quarters. Housing on the naval station, however, is limited, with government quarters available for only about 40 per cent of the eligible personnel. Government quarters are apportioned to each tenant activity of the naval station on a billet basis, with the actual assignment controlled by each commanding officer or officer in charge.

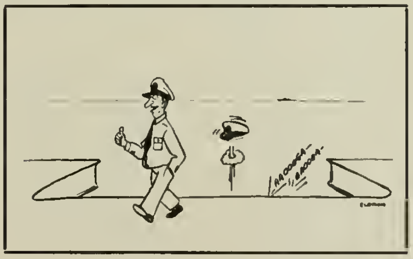
BOQ/WOQ—Bachelor quarters for 53 men and 10 women officers are available in the main BOQ. A BOQ annex is normally filled to capacity by Fleet personnel. The Commissioned Officers' Mess Open and Closed are located nearby.

Four-Plex Public Quarters—These are two-story buildings; some are occupied by officers and others by enlisted personnel, and are located on the naval station within walking distance of most facilities. They are completely furnished with electric range, water heater and refrigerator. All are equipped with a full basement and ample storage space.

Duplex Public Quarters—Some of these quarters are occupied by officers, and others by enlisted personnel, and are located on the naval station within walking distance of most facilities. They are completely furnished with electric range, water heater and refrigerator.

Lake Louise Public Quarters—These quarters are single-story and are occupied by officers only. They are located on the naval station about three and one-half miles from the Administration Building. They are completely furnished with electric range, water heater and refrigerator.

All-Navy Cartoon Contest
Richard F. Claydon, ADRC, USN



". . . and this here's the number three elevator."

Low Cost Defense Rental Housing (Lake Louise)—These units are single-story, duplex type and are occupied by officers. They are located on the naval station about three and one-half miles from the Administration Building. Rent charges vary from $31.05 to $40.50. Telephone, furnace oil and electricity charges vary with individual families and are in addition to the rent. They are furnished with oil space heater, electric range, water heater and refrigerator. Privately-owned washer and drier may be installed at tenant's expense.

Low Cost Defense Rental Housing (Civilian Hill)—These housing units are occupied by enlisted men and are located on the naval station within walking distance of most facilities. Rental is the same as at Lake Louise. Housing is of the single-story, duplex type. They are completely furnished with either oil burning kitchen range or electric range, oil space heater and hot water heater and refrigerator. Privately owned washers and driers may be installed at tenant's expense. Oil ranges are being replaced on a funds-available basis with electric ranges.

Inadequate Quarters—These units are Public Quarters that have been declared inadequate and are being retained for an indefinite period. They are occupied by both officer and enlisted personnel at a reduced BAQ. These units are furnished with electric stove, refrigerator and basic furniture items.

Aleutian Homes Project—In the City of Kodiak, there is a 342-unit housing project (Aleutian Homes) which has helped to alleviate the housing shortage. These units consist of two bedrooms without garage, unfurnished except for refrigerator and stove, and rent for $110.00 monthly; two bedrooms with garage, unfurnished, rent for $130.00 monthly; and three bedrooms with garage, unfurnished except for stove, refrigerator, semi-automatic washer and clothes drier, rent for $150.00.

The cost of utilities for these units averages approximately $85.00 per month.

Because of the above expenses, it is recommended that you have at least $300.00 to pay the first month's rent and deposits.

In addition to the above housing, a limited number of privately owned houses are available for rent in the city of Kodiak.

Roads—The only paved roads are on the naval station, between the station and town and in the city of Kodiak. The others are gravel, composed of sharp rocks that frequently bruise, cut and puncture automobile tires unless they are relatively new or thickly treaded snow tires. Winter travel is generally confined to the road between the station and Kodiak.

Automobiles—Automobiles are a necessity. Government transportation is limited and strictly controlled. Private cars may be transported from Seattle to Kodiak at government expense on a space required basis. Military personnel in pay grade E-4 with four years or less of service and pay grades E-3, E-2, or E-1 are not authorized shipment of privately owned vehicles at government expense.

Cars should be solid, sensible types and in excellent mechanical condition. Purchase of a new car is not recommended because of the rough roads, weather and volcanic dust, and because garage facilities and parts are limited. Your car should be undersealed before shipment. Snow tires or chains are necessary because frequent icy road conditions exist from December through March. Gasoline and oil are available on the station at prices comparable to those in Seattle.

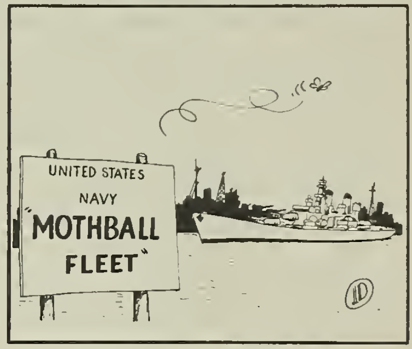
Schools—Grade school children (kindergarten through the eighth grade) living on the station go to the station school while those living in the city of Kodiak attend the city schools. An average of 300 students attend the station school.

High school students attend the Kodiak High School with free bus service provided from the naval station. The high school is fully accredited and has a program acceptable to colleges throughout the United States.

A Catholic grade school is maintained in Kodiak. The curriculum provides instruction for children in the first through the eighth grades.

Churches—Chaplains conduct a full program of services and religious education on the station and arrange regular services for groups of various denominations. Many servicemen and their families attend churches in Kodiak.

All Navy Cartoon Contest
John Lynelle Draves, QM3, USN



Food and Essentials—The commissary and Navy Exchange carry adequate stocks and are conveniently located. The commissary stocks a full line of meats, canned goods (including baby food), dairy products, staples and frozen foods as well as fresh fruits and vegetables when obtainable.

The Navy Exchange operates a retail store, barber shop, beauty shop, cobbler shop, special order desk, laundry, dry cleaner, tailor shop, garage, service station, cafeteria, photo finishing facilities, a watch repair shop and equipment rental facilities. In addition to the merchandise normally found in an Exchange in the continental United States, the Navy Exchange at Kodiak carries such additional items as heavy appliances, television, stereo and a complete line of men's, ladies' and children's clothing.

Recreation Facilities—A ceramic shop, cabinet shop, garage, little theater, bowling alleys, ski chalet, and recreation camp are all available. Bring your guns, fishing tackle, skis, personal bowling balls and shoes —you will find use for them in Kodiak.

Clothing—Kodiak is not a perennial icebox and your present wardrobe, with some additions, should prove adequate. The over-all emphasis should be on fall clothing because the summer months are rarely hot and winter months not severely cold. A warm overcoat is a must item, as are heavy-soled walking shoes, rain coat and galoshes. Heavy clothing is not needed for daily routine living, but sessions at the ski chalet or overnight camping trips make it advisable to bring woolen suits, sweaters, woolen socks, warm gloves, woolen scarves and ear muffs. For a child, a ski suit is an ideal garment. Since much of the recreation at Kodiak includes outdoor excursions, shoe packs with rubber bottoms, hip boots and chest-high waders for fishing trips are highly recommended. Down- or alpaca-lined three-quarter length parkas are desirable as protection against the cold winds. Although these items may be purchased locally, it is advisable to bring them since the selection of sizes and styles in available stock is limited. Special orders from outside take approximately a month for delivery.

Generally speaking, the accent is on informal dress. For women, sweaters, slacks, and skirts will serve during the winter months. But don't forget cottons—they are worn through the summer, and some days it is warm enough to wear shorts or a bathing suit.

The one item which poses a problem is shoes. Although the Navy Exchange has a shoe department and there are four shops in town which sell them, styles are rather limited and the stock is quickly depleted. If anyone in your family wears an unusual size, it is wise either to buy ahead or to make arrangements with your favorite shoe store. Men usually wear jackets and sport shirts. Bring along a radio and television set. All radios and TVs will pick up the local AFRS and AFRS-TV. Many stateside stations may be heard over shortwave radio, with reception good during the winter months.

Scenic Beauty—Photographers (both still and movie) will have a field day here. The scenery is spectacular, especially in the summer when everything is green. Mountains (at your back door), lakes, seashore and streams offer an unending variety of color and composition for photographers. Wild flowers are in abundance for about five months each year. Cameras and film are available locally.

Clubs—The station has an Officers' Club, CPO Club, EM Club, and a Marine Club, all within walking distance of most barracks and housing units. All are modern clubs offering bingo, food, drinks, and occasional entertainment by local talent and USO shows. All are heavily patronized and thoroughly enjoyed. The Kodiak Conservation Club is a sportman's club dedicated to conservation measures, especially the planting of fish in lakes and streams.

Medical Care—The naval station has a well-equipped hospital which furnishes medical care to military personnel and their dependents. Illnesses or injuries which require care beyond the capabilities of the hospital are transferred to the U. S. Air Force 5050th Hospital, Elmendorf Air Force Base, Anchorage, Alaska, or to a larger naval hospital, usually one on the west coast.

Immunizations Required—As directed in current BuMed Instructions, you should have completed smallpox, typhoid-paratyphoid and tetanus-diphtheria immunizations before departure for Kodiak. If under the age of 40 you should have completed the basic series of poliomyelitis immunization. However, travel should not be delayed for any except the first dose. Required doses will be given after arrival at Kodiak. Children under 16 years of age are required to be Schick negative or immunized against diphtheria.

Dental Care—Dental care is available to all military personnel as well as to their dependents. However, military personnel receive priority in treatment and dependent care must necessarily await space available; this tends to make the waiting period for routine dependent care some two or three months. Emergency care is provided immediately. Orthodontic treatment is not available on the island. Cost of travel to Anchorage for this purpose makes it prohibitive.

List of New Motion Pictures and TV Series Available to Ships and Overseas Bases

The latest list of 16mm feature movies and TV series available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Two one-hour TV shows are packaged together for a 108-minute program, but may be shown only aboard ship. TV series available for selection are: *Perry Mason*, *The Dick Powell Show* and *The Detectives* (melodramas) and *Rawhide* and *Gunslinger* (westerns).

Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

Motion Pictures

The Music Man (2086) (C) (WS): Musical; Robert Preston, Shirley Jones.

Jessica (2087) (C) (WS): Comedy Drama; Maurice Chevalier, Angie Dickinson.

The Hellions (2088) (C) (WS): Melodrama; Richard Todd, Anne Aubrey.

Night Creatures (2089) (C): Melodrama; Peter Cushing.

Mr. Hobbs Takes a Vacation (2090) (C) (WS): Comedy; James Stewart, Maureen O'Hara.

The Huns (2091) (C) (WS): Drama; Chelo Alonso, Jacques Sernas.

Hand of Death (2092) (WS): Drama; John Agar, Paula Raymond.

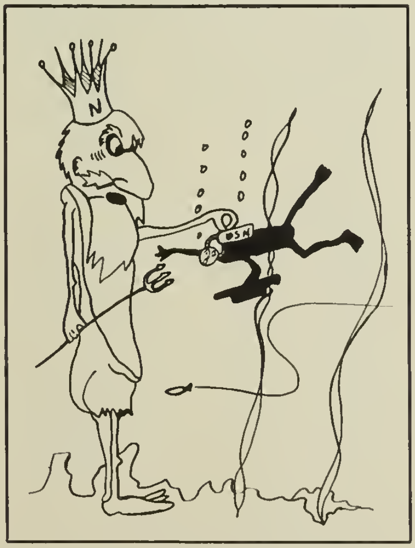
Doctor in Love (2093) (C): Melodrama; Michael Craig, Virginia Maskell.

Advise and Consent (2094) (WS): Drama; Henry Fonda, Charles Laughton.

Siege of Syracuse (2095) (C) (WS): Melodrama; Rossano Brazzi, Tina Louise.

The Centurion (2096) (C) (WS): Melodrama; Jacques Sernas, Genevieve Grad.

All-Navy Cartoon Contest
Flemon E. Dale, DMSN, USN



". . . And just what species are you?"

Bird Man of Alcatraz (2097): Drama; Burt Lancaster, Karl Malden.

Boys' Night Out (2098) (C) (WS): Comedy; Kim Novak, Tony Randall.

It Happened in Athens (2099) (C) (WS): Comedy; Jayne Mansfield, Nico Minardos.

Last of the Vikings (2100) (C) (WS): Melodrama; Edmund Purdom, Cameron Mitchell.

Counterfeit Traitor (2101) (C): Melodrama; William Holden, Lilli Palmer.

Television

5272: TV-1 *Perry Mason*—Waylaid Wolf. TV-2 *The Dick Powell Show*—Up Jumped the Devil.

5273: TV-1 *Perry Mason*—Impatient Partner. TV-2 *The Dick Powell Show*—Open Season.

5274: TV-1 *Perry Mason*—Shapely Shadow. TV-2 *The Dick Powell Show*—Death in the Village.

5275: TV-1 *Perry Mason*—Captain's Coins. TV-2 *The Dick Powell Show*—The Price of Tomatoes.

5276: TV-1 *Perry Mason*—Tarnished Trademark. TV-2 *The Dick Powell Show*—Seeds of April.

5277: TV-1 *Perry Mason*—Glamorous Ghost. TV-2 *The Dick Powell Show*—The Legend.

5278: TV-1 *Perry Mason*—Jealous Journalist. TV-2 *The Dick Powell Show*—Ricochet.

5279: TV-1 *Perry Mason*—Malicious Mariner. TV-2 *The Dick Powell Show*—John J. Diggs.

5280: TV-1 *Rawhide*—Long Count. TV-2 *The Dick Powell Show*—Three Soldiers.

5281: TV-1 *Rawhide*—Twenty Five Santa Clauses. TV-2 *The Dick Powell Show*—Goodbye Hannah.

5282: TV-1 *The Dick Powell Show*—Fifth Caller. TV-2 *Gunslinger*—Rampage.

5283: TV-1 *The Dick Powell Show*—Squadron. TV-2 *Gunslinger*—Death of Yellow Singer.

5284: TV-1 *The Dick Powell Show*—View from the Eiffel Tower. TV-2 *The Detectives*—Hit and Miss.

5285: TV-1 *The Dick Powell Show*—330 Independence S.W. TV-2 *The Detectives*—Walk a Crooked Line.

5286: TV-1 *The Dick Powell Show*—Safari. TV-2 *The Detectives*—The Queens of Craven Point.

5287: TV-1 *The Dick Powell Show*—The Clocks. TV-2 *The Detectives*—Crossed Wires.

Seavey Segment 1-63 Has News as Well as Cutoff Dates for Many a Man

Now's the time to review your status on Seavey if you're in one of the 24 ratings of Seavey Segment One. Sea duty commencement date cutoffs (which determine your basic eligibility for transfer ashore) have been established for Segment 1-63 (see box). This segment becomes effective on 1 Feb 1963; during February, orders ashore will be issued for transfers to be effected in June 1963.

The cutoff dates for Segment 1-63 are contained in BuPers Notice 1306, issued in September 1962. This directive also notes that:

- A 36-month shore tour has been established for men in the DS rating.
- The minimum shore tour for recruiters will be 36 months, effective 1 Jan 1963.
- Only men in these rates will be considered for recruiter billets: BMC, BM1, TMC, TM1, SMC, SM1, GMGC, GMG1. If you're in one of these rates and can qualify for recruiting duty in accordance with Chapter IV of the *Enlisted Transfer Manual*, you are urged to indicate recruiting duty as your preference.
- Petty officers 3rd class through chief of the YN, PN, SK and DK ratings will be considered for duty at main recruiting stations—but not for duty as recruiters. Assignments will be made on a "work in your rate" basis.
- Yeomen who indicate a duty preference for the Washington, D. C., area can expect orders soon after the effective date of the Seavey (1 Feb 1963). A clear record and a background investigation within the last five years are requirements for duty in Washington. Yeomen who have not had the background investigation should request one at the time they submit their rotation data cards.

You are reminded that your eligibility for security clearance must be recorded in block 15 of your rotation data cards.

No inquiries relating to your status on Seavey 1-63 can be answered before the effective date of 1 Feb 1963.

The May 1962 ALL HANDS contains a complete rundown on Seavey if you desire more details.

Beat the Cutoff Dates

If you're a GMMC, GMM1, FTC, FT1 or FT2, you may be able to beat the sea duty commencement date cutoffs for Segment 1-63 by volunteering for special instructor duty.

Men in these rates who commenced their sea tours before July 1961 and qualify for instructor duty in accordance with the *Enlisted Transfer Manual* (Art. 5.22), can be nominated for instructor duty by their commanding officers.

COs should submit nominations directly to the Chief of Naval Personnel (Pers B-213), with a copy to the cognizant Enlisted Personnel Distribution Office. If you're nominated, you will not be reported in the Seavey.

Commencement Date Cutoffs for Seavey Segment 1-63

Here's a roundup of sea duty commencement date cutoffs.

If your sea duty commenced on or before the date indicated for your rating, and you are not already in a previous Seavey, you should prepare rotation data cards and forward them to your Personnel Accounting Machine Installation for processing.

If you're still awaiting orders under previous year's Seavey, it's not necessary to submit new data cards.

RATE	DATE
BMC	Jun 60
BM1	Sep 57
BM2, 3, SN	Sep 55
QMC	Dec 59
QM1	Jun 58
QM2, 3, SN	Mar 58
SMC	Dec 59
SM1	Mar 57
SM2, 3, SN	Dec 56
GMTC, 1, 2, 3, SN	Jun 61
SOC	Dec 59
SO1	Mar 60
SO2	Jan 59
SO3, SN	Oct 59
TMC	Mar 60
TM1	Jun 59
TM2	Dec 57
TM3, SN	Mar 59
GMC	Dec 58
GM1	Mar 57
GM2	Sep 55
GM3, SN	Dec 55
RDC	Mar 59

RATE	DATE
RD1	Mar 58
RD2	Aug 58
RD3, SN	May 59
FTC	Dec 58
FT1	Sep 58
FT2	Jan 59
FT3, SN	Dec 58
MTC, 1, 2, 3, SN	Jun 61
MNC, 1	Jun 61
MN2	Sep 60
MN3, SN	Jun 61
ETC, 1	Jun 61
ET2	Jun 60
ET3, SN	Jun 61
DSC, 1, 2, 3, SN	Jun 61
IMC	Mar 60
IM1	Dec 60
IM2	Dec 58
IM3, SN	Apr 59
OMC, 1, 2, 3, SN	Dec 59
RMC	Jun 60

RATE	DATE
RM1	Feb 60
RM2	Aug 60
RM3, SN	Apr 61
YNC, 1, 2, 3, SN	Jun 61
PNC, 1, 2, 3, SN	Jun 61
SKC	Mar 60
SK1	Oct 59
SK2	Dec 59
SK3, SN	Mar 60
DKC	Mar 61
DK1	Sep 60
DK2	Mar 60
DK3, SN	Dec 60
JOC, 1, 2, 3, SN	Jun 61
PCC	Dec 55
PC1, 2, 3, SN	Dec 58
LIC	Dec 60
LI1	Jun 59
LI2	Oct 59
LI3, SN	Dec 59
DMC, 1, 2, 3, SN	Jun 61

DECORATIONS & CITATIONS

★ ★ ★ ★ ★ ★ ★ ★ ★

LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ Burch, William O., Jr., RADM, USN, for outstanding service as Commander, U. S. Naval Aviation Safety Center, from November 1958 to June 1962. Responsible for reducing annual naval aircraft losses to the lowest level ever attained in the history of naval aviation, RADM Burch consistently exercised a high degree of professional skill and resourcefulness throughout this period. Through his constant and meticulous attention to the problems of safety, he has been directly responsible for minimizing aircraft and aircrew personnel losses, resulting in a definite increase in operational readiness and substantial monetary savings. In stimulating command interest and attention to all aspects of aviation safety, and in initiating the Naval Air Training and Operating Procedures Standardization Programs, he has made a major contribution to the success of the Navy-wide safety effort.

★ Chew, John L., RADM, USN, for outstanding service from 10 June 1961 to 24 May 1962 as Commander Task Force 140 (Commander Project *Mercury* Recovery Force). Skillfully directing the recovery operations for Project *Mercury* manned space flights during this period, RADM Chew, through his outstanding professional ability and inspiring leadership, made an invaluable contribution to the successful completion of these suborbital and orbital flights and to the prestige earned for the United States thereby. In addition to directing the Recovery Force from the Control Center at Cape Canaveral, he also coordinated Contingency Recovery planning and information dissemination, keeping far-flung units around the world alerted as to the flight status.

★ Clark, Thurston B., RADM, USN, for outstanding service as Commander Fleet Air Wing, U. S. Atlantic Fleet, from January 1959 to June 1962. RADM Clark contributed immeasurably to the achievement of recent improvements in antisubmarine warfare (ASW) capabilities of the aircraft squadrons and wings under his command. Instrumental in establishing the Maritime Air Task Force, which has led to greatly improved reaction time for special air antisubmarine operations and in long-range surveillance situations, he has made a significant contribution to the achievement of a high state of readiness in the development of ASW tactics; he has also contributed to the marked improvement in the ability of patrol aircraft to coordinate effectively with the Ocean Surveillance System; and to improvements in sub/air barrier tactics.

★ Honsinger, Leroy V., RADM, USN, for service as Commander, Mare Island Naval Shipyard, from June 1959 to April 1962. Under RADM Honsinger's excellent leadership and guidance, the Mare Island Naval Shipyard achieved an outstanding record of production in the building, conversion and repair of all types of naval vessels, and contributed in large measure to the advancement of the *Polaris* program. Exercising a high degree of professional competence, personal integrity and diplomatic skill, RADM Honsinger demonstrated the highest concept of efficiency in management.

Gold Star in Lieu of Fourth Award

★ Warder, Frederick B., RADM, USN, for the performance of outstanding service as Commandant, Eighth Naval District, from January 1960 to June 1962. Exercising marked professional skill, organizational ability, tact, and resourcefulness, RADM Warder succeeded in solving a host of varied and complex problems involving military and civilian policies, thereby enhancing the prestige of the Navy. A dynamic and forceful leader, he expertly welded the various elements of his command into a highly integrated and cohesive unit, which made possible the smooth functioning that provided the most efficient service to the Fleet.

Gold Star in Lieu of Fifth Award

★ Loud, Wayne R., RADM, USN, for outstanding service from December 1960 to June 1962 as Commander Mine Force, U. S. Atlantic Fleet. Responsible for the increased integration of mining and mine countermeasure plans in amphibious operations, RADM Loud exercised outstanding professional skill and resourcefulness in carrying out his assignments during this period. Through his sound judgment, sense of perspective, and broad comprehension of the problems involved, inspections of overseas pre-positioned mine stocks were successfully implemented, resulting in a mining readiness posture unparalleled in the peacetime history of the United States. In addition, he was responsible for initiating an annual Mine Force Type Commanders' conference that presented solutions of common problems to the Fleet Commanders in Chief and the Chief of Naval Operations.

NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ Judd, Michael R., ET3, USN, for heroic conduct on the night of 16 Apr 1962 while serving on board USS *Porterfield* (DD 682), which was then engaged in plane guard operations for USS *Bon Homme Richard* (CVA 31) off the west coast of the United States. When a man was lost overboard from *Bon Homme Richard* at approximately midnight, Judd, partially dressed in a skindiver's suit, leaped into the frigid, treacherous waters and swam a distance of over 200 yards to reach and bring to the surface the exhausted victim. Keeping the man afloat until the rescue boat arrived, Judd, by his outstanding skill, courage and perseverance, was directly responsible for saving the life of a fellow serviceman.

★ Lowery, Douglas E., AMCS, USN, for heroic conduct in rescuing two men from a blazing vehicle on U. S. Highway 395 in San Diego, Calif., on the early evening of 22 Nov 1961. One of the first to reach the scene of the accident in which an automobile collided with another, rolled over, and burst into flames, Lowery, along with a companion, immediately rushed to the burning vehicle, loosened the seat belts of the two occupants, and succeeded in removing the victims to safety.

★ Gonzales, Richard A., SFFA, USN, for heroic conduct during the hours of darkness on the early morning of 18 Feb 1962, while serving on board USS *Taluga* (AO 62), en route to rendezvous with the Seventh Fleet. When he and another crew member were swept overboard from *Taluga* by an unusually large wave, Gonzales, although hurt, swam to the side of his seriously injured and unconscious shipmate, and managed to keep his head above water in the heavy seas for more than an hour until both were rescued safely.

BOOKS

GOOD HISTORY AND BIOGRAPHY INCLUDED IN THESE SELECTIONS

BOOKS SELECTED for review this month are a mixed lot, but they do succeed in presenting a good picture of what's going on today and what has happened in the past.

Take **Naval Review, 1962-63,** for example. Published by the U. S. Naval Institute, it is a substantial collection of original articles which, combined, takes a penetrating look at the Navy of today—its strength and its weaknesses. Subject matter ranges from "Naval Power as Understood by a Soldier," through the Navy supply system, to cold war in its various aspects and to such nuts-and-bolts items as a naval chronology for 1961, comments on *other* annual reviews, and a summary of recent changes in the world's warships. The Institute doesn't say so in so many words, but one receives the impression that it plans to make this an annual affair, which is a fine idea. All this sounds somewhat miscellaneous and perhaps it is, but taken as a whole, it still forms a relatively clear picture of what the Navy is up to. This is the sort of thing you run into: "The secret of Navy power is less a matter of weaponing than of winning millions of young men to a belief in their God-given talent to cope with problems utterly strange."

A refreshing thought.

For further background, you might take a look at **Forrestal and the Navy,** by Robert G. Albion, Robert H. Connery and Jennie B. Pope. James V. Forrestal's career in the Navy Department, as Under Secretary in 1940, through his Secretaryship, to the newly created office of Secretary of Defense in 1947, is thoroughly examined here. His role in the unification controversy of 1944-47, his relations with the President and Congressional committees, his attitude toward organizational struggles within the department, and his part in the recruitment of high-level personnel are discussed in detail.

And while we're on biography, we might consider **Unofficial History,** by Field Marshal the Viscount Slim. He's surprisingly readable and human, in spite of his somewhat exalted rank. Having presented a larger view of a major theater of war in **Defeat into Victory,** Lord Slim now discusses the smaller battles and campaigns which are often justly dismissed in a few lines by the official histories, but can become quite dangerous. He maintains that in every battle in which the British Army is called upon to fight, two factors remain constant: It will always be fought uphill and always at the junction of two or more maps. It is assumed that the maps will refuse to fold properly. One brief quote will give the flavor: While hiding behind a wall when under shellfire with a captured Italian officer, "At each burst the Italian, with his hands still above his head, and I with my revolver still pointing at his belt buckle, in perfect unison flexed our knees and sank below the wall to rise again just in time to duck once more. We must have looked remarkably silly." A picture that deserves to go down through the ages.

From biography to history isn't a difficult transition and, for this, we also have two selections: **Bataan,** by Stanley L. Falk, and **World War I,** by Hanson W. Baldwin. **Bataan** isn't pretty reading. Although a few survivors have written about their experiences, Falk, it is claimed by his publishers, is the first to tell the whole story of what happened on the notorious Death March, of what happened on the Japanese side as well as the plight of the Americans and Filipinos. He not only describes the march, and corrects several mistaken impressions of it, but also explains the conditions and causes that led to it.

If anyone can write readable military history, certainly Hanson Baldwin can. He's had enough practice. This is quite evident in his handling of **World War I,** subtitled "An Outline of History." His thesis: Never before had a war absorbed so much of the total resources of so many combatants. Never had so many nations been involved. Never had the slaughter been so comprehensive and indiscriminate. And never had the participants staked so much for so little. World War I, says Baldwin, set in motion forces that destroyed a century of stability, changed the face of Europe, and paved the way for the Russian Revolution.

There may be some connection between the next two titles—**Our World in Antarctica,** by LTJG A. Denis Clift, USNR, and **The Guerrilla, and How to Fight Him,** edited by LTCOL T. N. Greene—but we're not sure just what it may be. Perish the thought that we may have to fight guerrillas in the Antarctic.

Although the market appears to be flooded with Antarctic books, they all are fascinating and all show us different facets of the same object. **Our World** is a commercial presentation of Operation Deep Freeze and, as such, is somewhat more relaxed than the official version. Nevertheless, LT Clift, who spent two seasons on the ice, has managed to maintain a satisfactory air of authenticity as he tells of penguins and seals, glaciers and mountain ranges, men and machines. And, as usual, the photographs are utterly superb.

Guerrilla is a very, very professional book, as are most books on guerrilla warfare. (We have yet to see a cute, clever or humorous book on this subject, but we're sure they will manage it someday.) This is a collection of 15 articles originally printed in the pages of the *Marine Corps Gazette,* and discusses not only theory but down-to-earth how-to-do-it technique. Examples of successful and unsuccessful campaigns are discussed, with a critique of each. To give you an idea of the approach, we quote from the introduction: "Two weapons today threaten freedom in our world. One—the 100-megaton hydrogen bomb—requires vast resources of technology, effort and money. It is an ultimate weapon of civilized and scientific man. The other—a nail and piece of wood buried in a rice paddy, is deceptively simple, the weapon of a peasant." You take it from there.

Even the fiction this month is portentous. **Magnificent Destiny,** by Paul I. Wellman, is a historical novel which concerns itself with Andrew Jackson and Sam Houston during the early years of the republic. History in its more palatable form.

To the Coral Strand, by John Masters, is another in his series of the Savage family in India. In this instance, Rodney Savage faces the problems the independence of India has created for a European family which has been in the country for several generations.

ALL HANDS SPECIAL SUPPLEMENT

OUTPOST AGAINST DISEASE

At the northern extreme of Taiwan, a small group of Navymen are working. In Cairo, Egypt, another. At Berkeley, Calif., another, and at Great Lakes, Ill., still another. All are members of Naval Medical Research Units. This report on the operations of NAMRU-2, the unit at Taiwan, and NAMRU-3, at Cairo, will give an idea of what each, in its own area of endeavor, is attempting.

TO ASIAN PEOPLES suffering from a host of debilitating and killing diseases, Naval Medical Research Unit No. 2 has become a symbol of progress as real and as reassuring as many, more expensive economic, scientific and military aid programs launched by the United States since World War II.

In less than four years, NAMRU-2 has already made considerable contributions to Asian health. Among these are new diagnostic techniques for parasitic infections, a promising vaccine for trachoma, new methods of treating cholera victims, which can reduce fatalities to the vanishing point, and strides toward control of Japanese encephalitis. Considerably more important is the accumulation of a larger and more detailed knowledge of all the diseases which affect Asia. The unit's work to date has been preparatory. Its rapidly expanding reserves of knowledge, experience and skill are valuable now but will be used to increasing effect in years to come.

NAMRU-2 is, in theory, a purely practical and work-a-day organization. Its primary purpose is to obtain basic information about tropical and sub-tropical diseases to keep U. S. Navymen healthy when they visit Asian waters. But this is an over-simplified description. The only practical way to accomplish its mission is to eliminate the diseases or find effective methods of treating them. Medical research in Asia cannot be conducted in a vacuum; the discoveries and successes of NAMRU-2 concern half the area of the world and more than half the world's population.

THE PROBLEM IN ASIA has special features. Medical specialists of NAMRU-2 often find themselves sailing lightly charted seas, faced with diseases for which no effective therapy has ever been developed and even a few not adequately described in western medical literature.

However, it would not be accurate to give the impression that Asia is ridden with ailments beyond the understanding or experience of western science. With few exceptions, the diseases of Asia are found in other parts of the world, often in more virulent forms. The critical element, as in other generally underdeveloped areas is the numerous sources of infection. The problem lies not in finding new and mysterious diseases but in eliminating causes of existing diseases. Again with a few exceptions, this involves finding a means of breaking the cycles of transmission and reinfection in specific ailments. In all but a handful of examples, the causes of diseases are known. What remains is to find a simple method of prevention and cure.

An emphasis on applied research for Navy and civilian doctors attached to NAMRU-2 was from the outset a virtue born of necessity. There could be little room for the approach of the ordinary practitioner. What was

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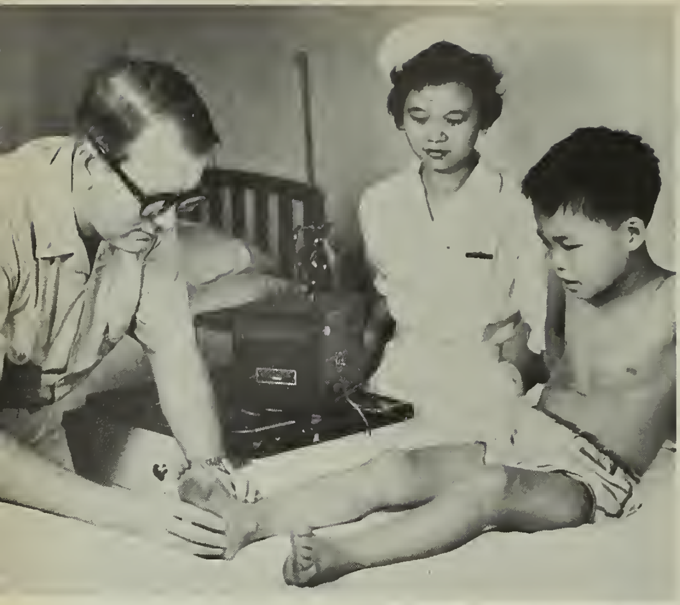
Based upon *NAMRU-2, Outpost Against Disease*, United States Information Service, Taipei, Taiwan; and *Report*, Naval Medical Research Unit No. 3, Cairo, Egypt.



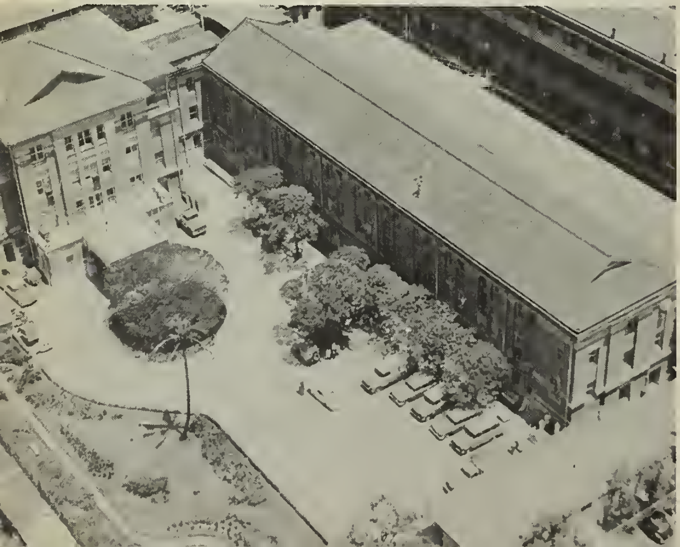
BLACKFOOT VICTIM — As a result of the disease, this boy has lost the big toe of his right foot.

called for was the dedication and the patience of the researcher and, in particular, the field researcher looking for practical answers to practical problems.

THE WORLD OF NAMRU-2 is populated with animals and organisms but most of all with people—millions and millions of people, many of them at least mildly sick. Asia is all too well supplied with sicknesses which are the result of overcrowding, substandard diets, poor sanitary conditions and lack of adequate medical care.

In a number of Asian economies an improvement in the standard of living hinges on a switch from total dependence on agriculture as the source of income to a more balanced economy and the development of industrial potentials. If a large proportion of the working force is suffering from such crippling ailments as trachoma, which may gradually blind its victims, industrialization becomes difficult. If trachoma can be stopped, the strength of the economy will improve and the possibility of economic development will increase.

OUTPOST HEADQUARTERS — This building houses the laboratories to which 29 Americans are assigned.



FOLLOWING THE RECOVERY of Guam from the Japanese in 1944, NAMRU-2 moved there for the remainder of the war years. With the war's end and the decision that Guam was too small to support a medical research institute, it was disbanded.

Ten years later, in May 1955, an agreement was reached between the United States and the Republic of China authorizing the U.S. Navy to conduct research on tropical diseases in the western Pacific from a headquarters in Taiwan. A building formerly used as a nurses' dormitory for the National Taiwan University Hospital was leased for 20 years for one dollar.

Approximately 90 per cent of the professional, technical and administrative staff members are Chinese nationals working under contract with the Taiwan University Hospital.

At present, although NAMRU-2 stresses the development of curative methods and techniques suited to Asian conditions and pocketbooks, it ranks as one of the world's leading research laboratories, with equipment and facilities which can rarely be matched in any single institution in the Pacific area.

While research is its primary field, NAMRU-2 also has a small 20-bed ward for patients suffering from a disease under study, or who have been referred because no other suitable facilities are available for a complete clinical evaluation. More than 200 patients have been admitted in the four and one-half years since the ward was opened on 13 January 1958.

A full third of all ward patients have been victims of the mysterious black foot disease or spontaneous gangrene, which is in some senses a medical curiosity. In "blackfoot," the causes of the condition are still not clear. The patients—many of them children—who are gradually losing their fingers or toes because of impaired circulation of blood, get not only tender and efficient, but enormously detailed, scientific care.

THE CLINICAL INVESTIGATION DEPARTMENT in charge of the hospital ward also cooperates with other medical institutions, either by lending equipment, such as the iron lung owned by the ward, or assisting in diagnoses where outside opinions are requested. To some extent, it might be considered the operational arm of the organization as opposed to the more theoretical research departments. The distinction, however, is not entirely valid because NAMRU-2 research is no ivory-tower affair.

NAMRU-2 has yet to uncover any new or astonishing ailments unknown to western science, nor are any such discoveries really expected. Beyond a few unreported species of intestinal parasites of minor importance in determining Asian health levels, and the isolated instance of blackfoot disease, for which no good reason has yet been found, NAMRU-2's operations are conducted in known areas. The problem has been to find a means to counter the effects, and in particular, to find inexpensive curative or preventive techniques suited to use by large blocs of Asian populations infested by a given disease.

Since the inception of the research unit its interest has been centered on the highly infectious and generally more lethal diseases of the East. High on this list would be cholera, Japanese encephalitis, smallpox and other epidemic diseases for which reservoirs of infection still persist. However, the largest single research program now in progress is a determined effort to cope with the elusive and destructive virus which causes trachoma, a progressive infection of the eye tissues which may eventually cause total blindness. At least 300,000,000 Asians suffer from chronic trachoma. If victims in other areas of the world are added, it may well rank as the most prevalent disease of humanity, with the exception of the common cold.

OTHER RESEARCH AREAS include studies of viral diseases in general and the wider range of diseases caused by intestinal parasites. Blackfoot disease, already mentioned, gets a large share of attention, but chiefly because the condition is apparently unique to Taiwan.

Trachoma is one of the major infectious diseases which have strongly resisted modern scientific techniques. It can be treated medically or by a combination of medicine and surgery in more advanced cases, but the results are uncertain. The disease may recur or, as in many infected areas, the patient is constantly exposed to reinfection and gets it again after the treatment has been stopped.

NAMRU-2 was among the first to work on trachoma vaccines. A number of types have been produced experimentally over the past three years. The most promising has been in use for more than a year, and some 1500 individuals have been inoculated. However, it is still too early to determine the exact degree of the vaccine's effectiveness.

One experimental program recently initiated by the department of virology is an attempt to grow the virus in tissue cultures. If this proves successful, it will be possible to improve the purity of the vaccine and, in all probability, reduce the present cost of production.

In contrast to trachoma, which "only" blinds and maims, cholera is an epidemic killer. Although slowed considerably in recent years by improved sanitation, it remains, nonetheless, a frequently recurring threat in many parts of the world, particularly in south and southeast Asia. Some 12,000 deaths were reported in 1960 from Pakistan. Other outbreaks have occurred in Thailand and India in recent years.

CHOLERA CHECK — NAMRU-2 Researchers in Thailand joined SEATO cholera lab in spot investigation.

SINCE THE PREVENTION of waterborne epidemic diseases is a major public health problem, calling for national or international operations on a large scale, NAMRU-2 has contented itself in the main with working out better techniques for treating patients and studying the disease itself.

The patient can be nursed through to recovery provided he gets care which can be given almost anywhere. But, from the viewpoint of a research scientist, this is barely a good start. For one thing, even the best method of treatment may not succeed under major epidemic conditions, when the patients are too numerous or too inaccessible to be reached by medical personnel. Another is the question of what happens when a human being gets cholera. How do the villainous little microorganisms work? And, most important of all, what ideas can be dredged up to see to it that they don't get started on their work at all?

Most of these are still questions without firm answers, but the NAMRU-2 personnel are exploring avenues which may eventually yield definite solutions.

A SPECIMEN QUEST takes this Navyman through a remote community on Turtle Island, near the Taiwan coast.

While the health problems of Asia are mainly caused by diseases that are in some way linked to low living standards or poor sanitation, at least one highly lethal ailment has almost no relation to such concerns.

Japanese encephalitis has no particular association with Japan; it is found commonly throughout almost every part of the Far East. In infected zones virtually every adult has at one time had the disease, usually in mild form, and has acquired immunity. Consequently, seriously affected victims are almost always youngsters or unexposed adults from other areas who have no immunity. Each year an almost predictable number of American visitors to the Far East fall victim to the disease. About half of such cases either do not recover, or are left with some degree of brain damage. No effective therapy is known.

Since Japanese encephalitis is carried by a mosquito, a promising approach to reducing the number of cases would be to break the cycle of transmission by eliminating this key link. NAMRU-2 is trying to find solutions to this problem.

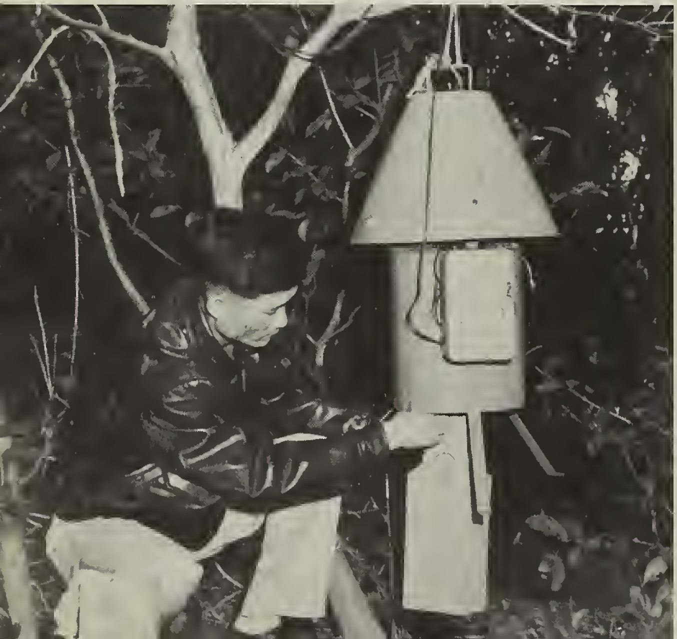
One phase of current NAMRU-2 research is a day-in-day-out checking of encephalitis viruses recovered from thousands of mosquitoes, most of them from Taiwan or Okinawa. In 1960, insect traps maintained in Okinawa and Taiwan yielded a harvest of over 100,000 mosquitoes, which were later separated by species and tested for infection.

BECAUSE OF POOR SANITATION, the Far East abounds in a variety of troublesome and often dangerous parasitic organisms. Some, like the amoebae found in at least 20 per cent of Asian intestinal tracts, may remain there for years without causing any symptoms of illness. Others cripple or kill.

Active work in NAMRU-2 is currently centered on three relatively frequent parasitic ailments which share a common characteristic, in that the responsible organism passes through a cycle in the body of a freshwater snail.

The over-all problem of parasitic infections is mammoth. Conservatively speaking, the health of at least half the population of Asia—well over 500,000,000 people—is affected by parasites of one kind or another.

MOSQUITO TRAPS of this type provide the NAMRU-2 laboratories with infected encephalitis carriers.



KOREAN DOCTOR studies mosquitoes raised in laboratory in an effort to combat Japanese encephalitis.

Even the work of finding and classifying all the types is still far from complete. Although the major species are known, there are a great variety of species and sub-species with differing characteristics.

While snail control as a primary campaign device appears out of the question until more effective exterminating techniques can be evolved, it may be of value in local applications. NAMRU-2 is now experimenting with new American and European compounds developed for use in Egypt and the Near East, where this problem is even more serious than in the Orient. The results have not been encouraging. Asian snails have demonstrated a much higher tolerance for these preparations than snails in the Near East.

ANY ASPECT OF DISEASE in Asia is included in NAMRU-2's area of interest—at least to some degree. Both staff members and research fellows are selected with a view toward having as wide a range of talents and experience as possible. As a consequence, and on what might be termed the more purely medical side, a portion of the unit's attention has been given to targets of opportunity—unusual clinical materials which happen to turn up in the Asian areas.

The perils of death from snakebite or poisonous insects are not considered sufficient to make this a major NAMRU-2 preoccupation, but the subject is not entirely neglected. Asia is more than adequately supplied with poisonous reptiles, including the krait, Russell's viper and the much-feared but not too commonly seen king cobra. There are also poisonous spiders and even venomous snails.

Life for a majority of NAMRU-2's research workers consists of about equal intervals in the relative comfort, peace and seclusion of the laboratory headquarters in Taipei or bouncing in jeeps or station wagons over unpaved rural roads in any corner of Asia. Useful results in the laboratory depend on a steady flow of innumerable specimens and other forms of raw information from the field. In Asia, laboratory men double as both collectors of data and observers of the results of their work. Some spend very little time at home.

Even this description is not so romantic as it might sound. The travel usually involves the same bounces on the same rough roads en route to the same places for more of the same kind of investigations. For obvious reasons, including the need to hold down expenses, NAMRU-2 field research teams have done most of their touring in back-country Taiwan.

But NAMRU-2 staffers do get abroad on occasion, almost invariably to spots well off the beaten tourist trails. One major field investigation conducted in 1960 was a six-week study of biological and geomedical factors in British North Borneo. Some 13 staff members from various departments formed the research team invited by the North Borneo government. Primary emphasis was placed on the collection of human and animal parasites and gaining information on diseases prevalent in the area. Viewed as a preliminary investigation and as a source of study materials, the trip was extremely successful.

While the Borneo trip was the largest investigation effort staged thus far by NAMRU-2, smaller-scale field surveys have been continuing for the past five or six years. Countries visited include Japan, Korea, the Philippines, Thailand, Malaya, India and Pakistan, in addition to such offshore islands of Taiwan as the Pescadores and Orchid Island.

One interesting outgrowth of NAMRU-2's collecting efforts is the emergence of the parasitology department as a major supplier of specimens of all varieties to scientific research institutes in almost every corner of the world. In the last four years, to give a partial list, NAMRU-2 has collected, and shipped to other institutions, over 1500 mammal skins, 2500 catalogued and prepared wild and domestic birds and thousands of fish and reptiles. Even more important, and much more numerous, have been a multitude of infected snails, parasitic worms, mites, ticks and microscopic organisms beyond number.

The list of recipients of these unusual collections is an international one. Bird lice, for example, are sent to the British Museum in London. Roundworms to McGill University in Toronto, Canada. Mites are in demand in Panama, where the U.S. Public Health Service laboratory specializes in their study. Ticks go to NAMRU-3, the NAMRU-2 sister organization and counterpart for the Near East, in Cairo. Lung mites from snakes are supplied to a research institute in Malaya.

NAMRU-3, in Cairo, Egypt, has a similar objective in life, but the details are slightly different. It is located near a 1500-bed hospital and is able to provide medical care to enough willing patients for extended periods to enable it to provide controlled observations on diagnostic procedures, therapy and follow-up.

The combination of an almost endless supply of patients with a large variety of diseases and the opportunity to make lengthy studies of these patients has resulted in many useful findings.

Because of the nature of the diseases found locally, NAMRU-3 has been able to concentrate its efforts in those fields of biology dealing with arthropods (insects and spiders) and their relation to man's health. As is the case with NAMRU-2, it is one of the few foreign posts where naval researchers interested in exotic diseases can work actively in their fields. Excellent training is provided during their tour of duty, and many gaps in knowledge of global epidemics are closed by their investigation.

The present staff is comparatively small; 136 persons, of whom 27 are U. S. service personnel and several are U. S. civilian scientists. The rest are Egyptian nationals. Approximately two-thirds of these people are engaged in research or support of research, and the others are on the administrative or maintenance staff.

Supplementing research, NAMRU-3 serves as a training and demonstration center. Egyptian doctors are accepted for advanced training each year. Other Egyptian and Near East technicians are given courses in laboratory methods and techniques. The department of clinical medicine demonstrates the latest U. S. medical techniques to practitioners throughout the Near East. Biological research related to medical problems is undertaken by the various departments.

The Egyptian community has over the years collaborated on problems common to both the Near East and the United States. In this manner, NAMRU-3 has become a prototype and an example of the best in international cooperation. This growing atmosphere of mutual respect, friendliness and cooperation is one of the many rewarding scientific and diplomatic results of medical research in Taiwan and Egypt.

ON THE ROAD — A NAMRU-2 field team returning from a collecting and testing trip makes a routine rest stop.

TAFFRAIL TALK

We suspect the founders of the Navy Bean Soup Contest didn't know what they had wrought when they began the whole thing. From all reports, it appears to be getting out of hand. For one thing, third place in the 1959 contest was won by the Army Engineers. Now the whole noble enterprise is threatened by an Army sergeant and others whose antecedents and qualifications are, to say the least, suspect.

It is noted that the sergeant has tried to snow the judges by overwhelming them with a five-page recipe, freely interspersed with irrelevant comment and gratuitous self-advertising. It is further noted that he tried to influence the judges' strictly impartial decisions by closing with the tale of how the sergeant once gave a sip of his own special bean soup to a Spanish-American War veteran, who "immediately threw away his cane and allowed as how San Juan Hill sure looked a lot flatter now."

But at least the good sergeant, who shall be nameless, has *some* pretensions to respectability. He holds a commission from a former governor as an admiral in the Nebraska Navy.

★ ★ ★

But what can we say of those others who are trying to horn in on a fine old and, we had assumed, exclusive Navy tradition? There is the Navy civil-servant—and a female, at that—who titled her entry "Kelly Bean Soup," combining use of her maiden name and that of a food-processing company which has agreed to can the winning—ah, concoction.

There is a rumor, unconfirmed, we are happy to say, that one of the larger naval installations has gone to the unethical extent of running its recipe through an electronic computer before submission. Where, we repeat, is this thing going to stop?

★ ★ ★

And the titles! Consider, if you will: "Campfire Bean Soup" (who ever heard of a campfire aboard ship?), "Easy Dinner Bean Soup" (an *easy* bean soup? Never!), "Bean Soup a la Espanol" (with tomatoes, we presume. Big deal), "Romano Bean Soup" (well . . .), "Thick Bean Soup" (nonsense. All good bean soups are thick), "Show me Bean Soup" (? ? ?), "Navy Minestrone Soup" (gentlemen, this is a *bean* soup contest. Remember?), "VIP Buffet Bean Soup" (what are you trying to do, Mac? Make points?), "Flagship Special" (hey, how about us little guys?), and "Epicure Bean Soup" (aren't they all?).

However, we are happy to note that the Fleet is mentioned in passing in the swarms of publicity releases concerning the contest. It is even admitted that it holds a slight edge on the infantry and artillery, with entries coming from submarines, radar picket ships, minesweepers and even civilian-manned ships of MSTS, not to overlook an aircraft carrier converted to an amphibious assault ship.

Get in there and fight, men!

★ ★ ★

Sorry. We became so carried away at the thought that a sister service (which, of course, we respect and deeply admire) might carry away top honors, in an area which the Navy claims as its very own, that we overlooked the fact that by the time you read this the contest will be over.

We can but hope.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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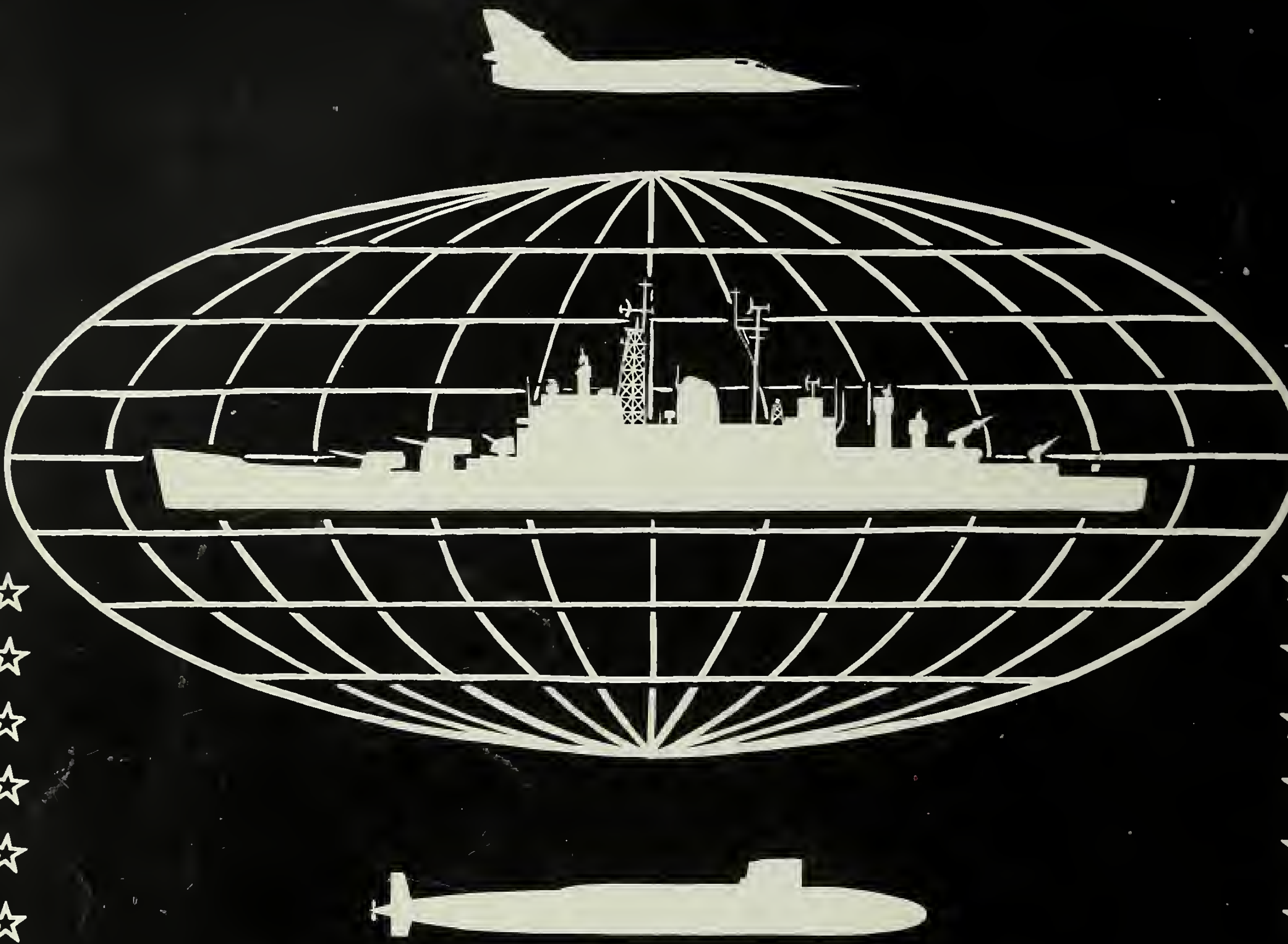
● **AT RIGHT: FAST OPERATOR FAST — J. G. Fast, BM3, on board the guided missile cruiser USS *Little Rock* (CLG 4) handles the control levers of FAST (Fast Automatic Shuttle and Transfer) system, Navy's latest device designed to minimize underway replenishment time.**

UNITED STATES NAVY



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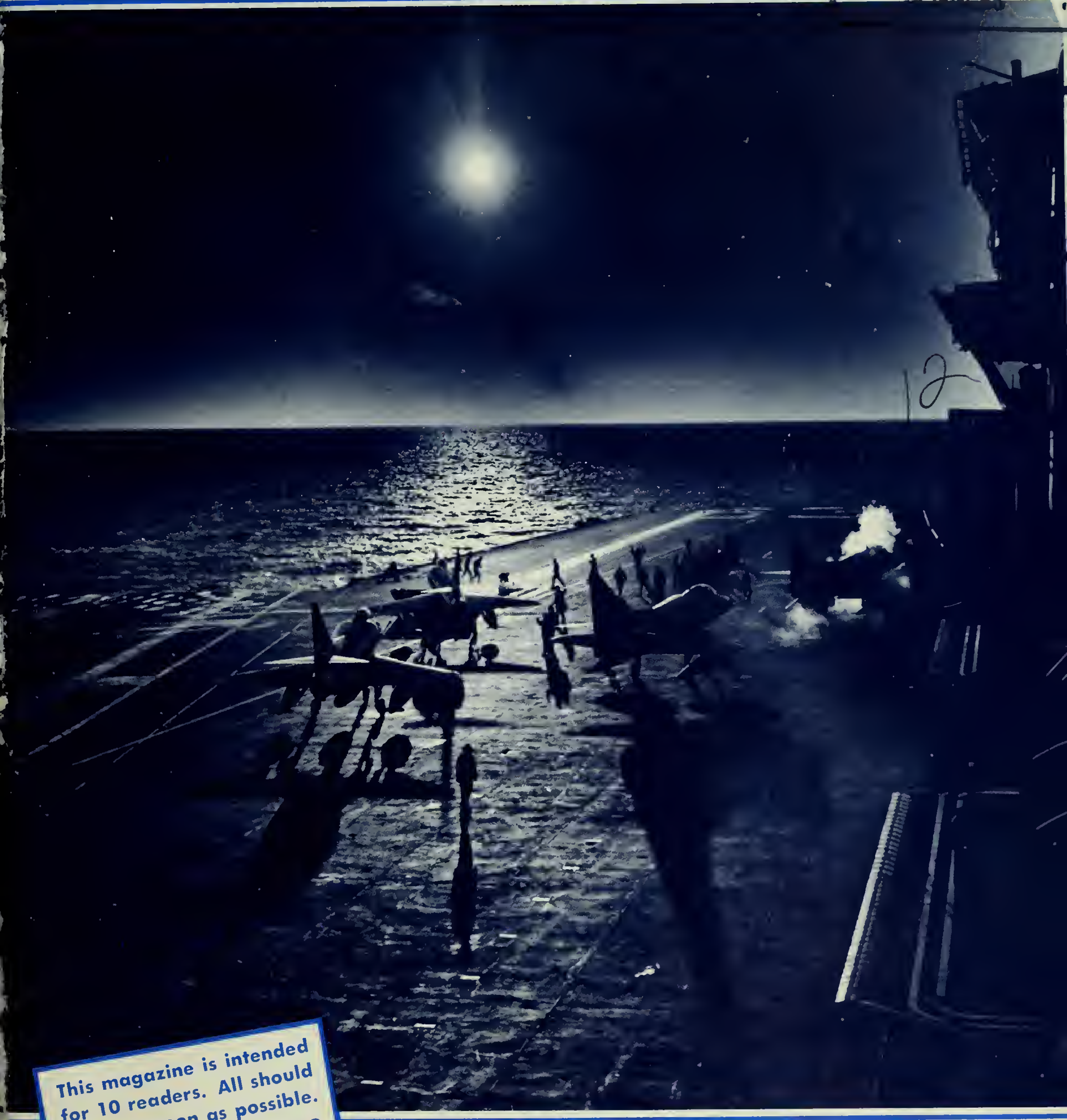

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DECEMBER 1962

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

DECEMBER 1962 Nav-Pers-O NUMBER 551

VICE ADMIRAL W. R. SMEDBERG III, USN
The Chief of Naval Personnel

REAR ADMIRAL A. S. HEYWARD, Jr., USN
The Deputy Chief of Naval Personnel

CAPTAIN J. L. COUNIHAN, USN
Assistant Chief for Morale Services

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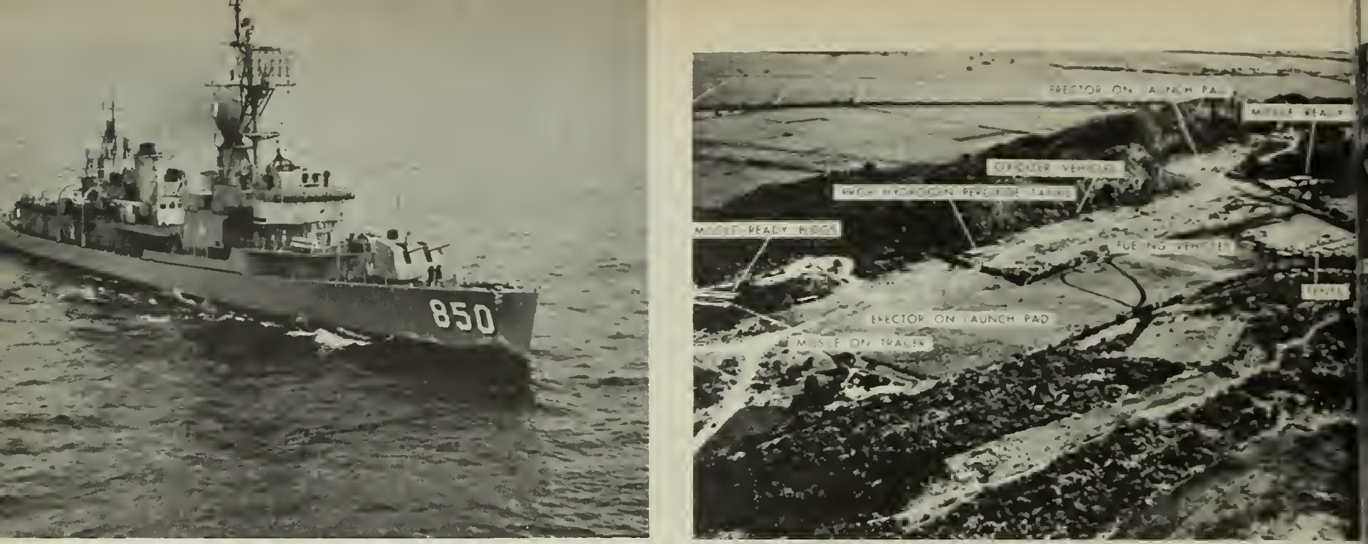
CDR F. C. Huntley, USNR, Editor
John A. Oudine, Managing Editor
Associate Editors
G. Vern Blasdell, News
Jerry Wolff, Research
Don Addor, Layout & Art
French Crawford Smith, Reserve

• FRONT COVER: SUN DOWNERS—Navy jets are 'shot' towards the setting sun from forward cats on board guided missile aircraft carrier USS *Kitty Hawk* (CVA 63) during evening flight operations. Photo by Richard Smith, PHC, USN.

• AT LEFT: BAY VIEW — A photographer in a plane approaching from the south captured this view of the U. S. Naval Base at Guantanamo Bay, Cuba. This photograph was released for publication a few years ago.

• CREDIT: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.



USS JOSEPH P. KENNEDY (DD 850) helped intercept *Marucla. Rt:* Defense Department photo of missiles in Cuba.

Incident in History—

THE SEARCH AND VISIT of the Lebanese freighter *Marucla* during the quarantine of arms shipments to Cuba, carried out by the U. S. Navy, was a quiet, almost routine-sounding affair. The mere fact that it was conducted, however, may well be rated by future historians as one of the more decisive military/diplomatic maneuvers ever staged by the United States.

The boarding of *Marucla* in the open sea, some 180 miles northeast of Nassau in the Bahamas, served eloquent notice to Cuba and the Soviet Union, as well as the rest of the world, that the quarantine was not just a proclamation, but an irrefutable fact—backed up by the necessary seapower to make it stick.

It was, indeed, one for the book, and that's just how the Navy played it—according to the book. Although detailed instructions were issued to Task Force 136 ship commanders, in this case, as with practically any situation which might confront him, a ship commander has only to turn to one of the many "bibles" always at his disposal to check up on the proper procedures to be followed.

Visit and search regulations are contained in the Department of the Navy publication *Shipboard Procedures,* NWP 50(A). Section e—"Visit and Search, Boarding and Prize Crew Bill"—of Art. 712 states:

"The visit and search, boarding and prize crew bill, as prepared by the type commander, provides an organization for the logical progression of events from the dispatch of a visit and search party to final seizure of a vessel. One or all of the three phases of the bill may be placed in effect, depending upon the circumstances at hand."

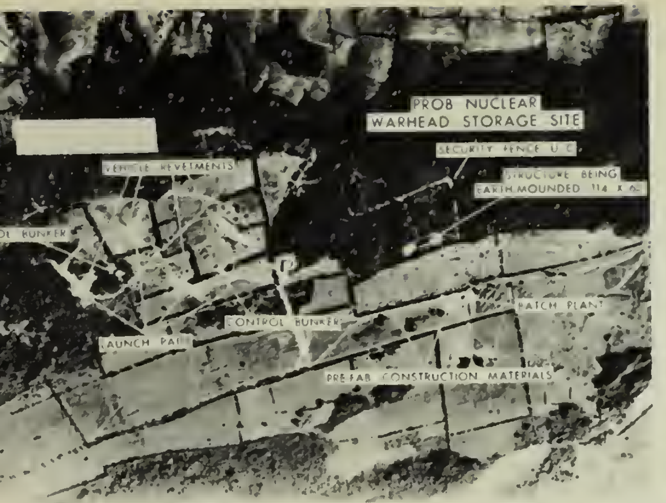
When Phase I (Visit and Search) of the bill is put into effect, general quarters is sounded, and the entire ship's company goes to battle stations. The visit and search crew falls in at its boat, where the gunner's mate provides guns and ammunition, if these items are to be carried. The quartermaster furnishes visual signaling equipment. Then the word "Away the visit and search crew boat No. ———."

The boat which is sent by the ship of war may carry arms. The boarding officer must examine the boarded ship's papers to ascertain nationality,

Outbound from Cuba

Inbound to Cuba

PHOTOS released by Department of Defense show Soviet ships inbound and outbound to and from Cuba.



CUBAN MISSILE base is shown in DOD photograph. *Rt: USS John R. Pierce* (DD 753) teamed up to intercept *Marucla*.

Intercept of Marucla

character of cargo, ports of departure and destination, and other pertinent data.

He then recommends to his commanding officer either that the vessel be released (when papers or detailed search and inspection prove the innocent character of vessel, cargo and voyage) or that the vessel be captured and sent in for adjudication (if papers, questioning of personnel and searches do not result in satisfactory proof of the vessel's innocence).

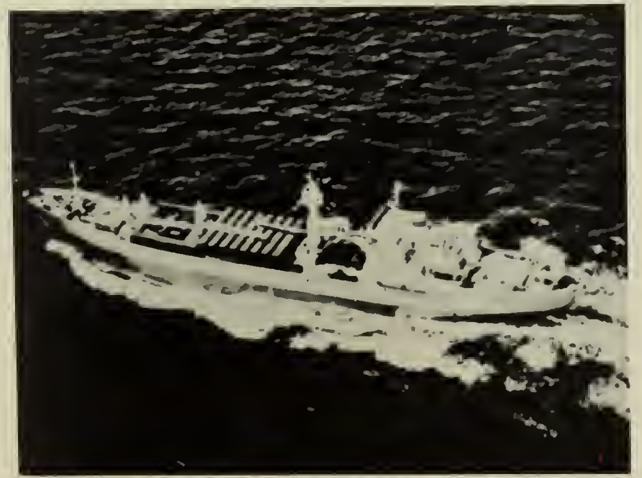
Papers of merchant or private vessels are generally: A certificate of registry of nationality, or certificate of bill of sale in the event the vessel has recently been transferred; crew list; passenger list; bill of health; clearance; charter party, if chartered; invoices or manifests of cargo; bills of lading; a consular declaration certifying the innocence of the cargo (which may be included, but shall not be considered any more conclusive than any of the other items listed); and the ship's log (to be examined to determine whether the vessel has deviated from her direct course).

After results of the examination are conveyed to the commanding officer of the visiting ship by visual signals, the boarding officer makes an entry in the visited ship's log showing either that the vessel was visited, her cargo and papers found to be in order and her voyage lawful; or that the vessel is being detained on orders of the visiting ship's commanding officer.

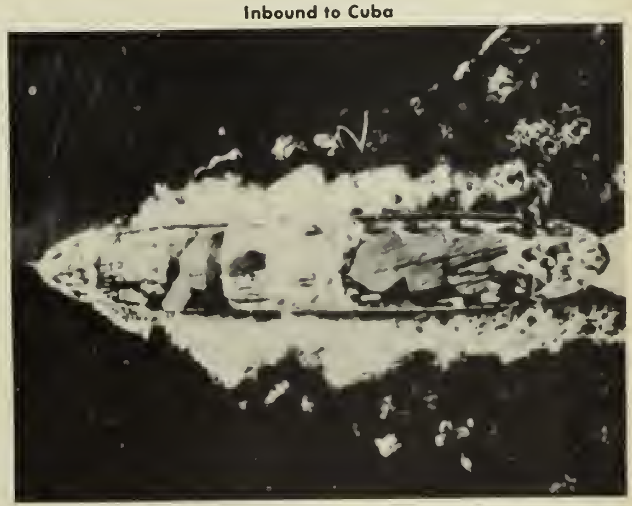
Marucla, a U. S.-built former World War II Liberty ship, now Panamanian-owned and of Lebanese registry and sailing under Russian charter from the Baltic port of Riga, Latvia, was first contacted about 2230 by the destroyer USS *John R. Pierce* (DD 753). Soon after midnight *Pierce* was joined by *Joseph P. Kennedy, Jr.* (DD 850). The ships then trailed *Marucla* at a distance of about two miles throughout the rest of the night, with instructions to stop her, and board her, at the first clear light.

Both ships held radio conversations during the night with *Marucla's* skipper, who indicated he was more than willing to cooperate. At about 0700 the next morning, *Kennedy* hailed *Marucla* with flashing light

Inbound to Cuba



Inbound to Cuba



INBOUND SOVIET ship (*left above*) was carrying crated Russian jet light bombers lashed to its deck.

Blockade and Quarantine

Forming a barrier of ships to stop all sea traffic from entering or leaving a designated port is old strategy in the history of nations. Naval blockades have been applied successfully at various times in the past.

For example, during the Civil War, Union privateers and picket ships were used to form barriers around Confederate seaports. As a result, shipments of food and munitions to the South were held to a minimum.

During the Spanish-American War of 1898, Spanish forces in power in Cuba and Puerto Rico were blockaded by the U. S. Navy.

Germany was hurt by Allied blockades during World Wars I and II. Another effective war blockade was used by the U. S. against Japan.

The most recent naval blockade was set up during the Korean conflict.

Use of a blockade is based on international law which requires that it must be formally declared and must not extend beyond specified enemy costal areas. The blockade must be based upon some specific military objective, and must be continuously and impartially enforced.

And, it must be effective. Proclaiming a blockade without sufficient power to enforce it has no validity.

As distinguished from the true "blockade," which is a belligerent act, the recent action against the shipment of offensive weapons to Cuba is a "quarantine" intended to preserve the peace. Moreover, a vessel captured attempting to run a "blockade" must be brought before a Prize Court and vessel and cargo are liable to confiscation. Under the "quarantine," vessels carrying offensive weapons to Cuba are to be diverted or these offensive weapons offloaded and kept in protective custody in a U. S. port, ultimately to be returned to their true owner.

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and simultaneously ran up the international flaghoist "Oscar November," which means: "You should heave to. Stop at once."

Aboard *Kennedy*, the visit and search party stood by its boat. It consisted of the Boarding Officer, LCDR K. C. Reynolds, Executive Officer of *Kennedy*; LCDR D. G. Osborne, Exec of *Pierce*; and ENS E. A. Mass, ENS P. W. Sanger and Signalman Second Class J. P. Ruppenthal, all of *Kennedy*.

The boarding party was not armed. This was not considered necessary, particularly since they were in view of both *Kennedy* and *Pierce*. The uniform for all members was service dress white.

At 0729 the boat was lowered over *Kennedy's* side to the water, and at 0736 was underway for *Marucla*. *Marucla* lowered a Jacob's ladder over her side. A few minutes later, the boarding party messaged: "Party aboard *Marucla* at 0750. Cooperation good. No difficulties expected."

Aboard *Marucla*, LCDR Reynolds introduced himself, announced the purpose of his visit, and asked to examine the ship's records. The master's cabin was utilized for this purpose. *Marucla's* master, chief mate and radio operator all spoke fluent English. The master was familiar with the President's quarantine order. A copy of Navoceano Washington Official Warning Number 30, advising of the quarantine and the advisability of using Mona Passage rather than the Windward Passage, was aboard.

Upon completion of the records examination, the boarding officer proceeded with an appropriate search, accompanied by the master, chief mate and radio officer. During the search, the conversation was formal, and was concerned primarily with the examination of deck-loaded trucks and the inspection of one hold, which was opened at the request of the boarding officer. The master reported that this was the first voyage of his vessel to Cuba. He had departed Riga on 3 October, transited the Kiel Canal, then proceeded towards Cuba.

VADM A. G. Ward, USN

The visit and search party's investigations revealed that *Marucla's* cargo consisted of sulphur, paper rolls, trucks and truck parts. At 1020, the party returned to *Kennedy* and *Marucla* was allowed to continue on her way.

Pierce is named in honor of LCDR John Reeves Pierce, USN (Annapolis '28), skipper of the minelayer-submarine *Argonaut* (SM 1), who was lost along with his entire crew when *Argonaut* was sunk by a combined depth charge and shelling barrage during an attack on a Rabaul-bound convoy of Japanese transports off the coast of New Britain in January 1943. LCDR Pierce was posthumously awarded the Navy Cross.

Kennedy is named for President Kennedy's older brother, Joseph P. Kennedy, Jr., a Navy flier who was killed when his B-24 *Liberator* bomber exploded during a volunteer bombing mission over Germany in 1944.

* * *

Enforcing the quarantine on arms shipments to Cuba has been the responsibility of Navy commands under Admiral Robert L. Dennison, USN, Commander in Chief, U. S. Atlantic Fleet. Ships forming the quarantine barrier are units of the U. S. Second Fleet, commanded by Vice Admiral Alfred G. Ward. Here are brief sketches of these two Navymen.

Admiral Dennison, 61, has had many important assignments during 39 years as a naval officer. In World War II he helped plan the Attu and Kiska Island campaigns in the Aleutians. He served as naval aide to President Truman from 1949 to 1953. And, since 1960, ADM Dennison has been Supreme Allied Commander of the North Atlantic Treaty Organization's Allied Forces, Atlantic.

As both SACLANT and CINCLANTFLT, ADM Dennison has two staffs in two buildings in Norfolk, Va., where he also makes his home.

Admiral Dennison was born in Warren, Pa., in 1901. He was graduated from the Naval Academy in 1923.

His first duty as a junior officer was on board the battleship USS *Arkansas* (BB 33). He later qualified as a submariner.

Between 1930 and 1941 ADM Dennison commanded the submarine rescue ship USS *Ortolan* (ASR 5), the submarine USS *Cuttlefish* (SS 171), and the destroyer USS *John D. Ford* (DD 228).

During World War II his units took part in the defense of the Philippines and East Indies. He also commanded the battleship USS *Missouri* (BB 63).

After serving as naval aide to President Truman, ADM Dennison returned to sea as Commander of Cruiser Division Four in the Atlantic. In 1956 he took command of the First Fleet. In 1958 he was made Deputy Chief of Naval Operations, and the following year became Commander in Chief of the Eastern Atlantic and Mediterranean area. Admiral Dennison assumed his present command in 1960.

ADM R. L. Dennison, USN

As commander of the Atlantic's Second Fleet, VADM Alfred G. Ward, 53, is in charge of Task Force 136, the enforcement arm of the quarantine of Cuba.

The Second Fleet is based in Norfolk, Va.

Vice Admiral Ward was born in Mobile, Ala., in 1908. He attended Barton Academy in Mobile and served one year as a Navy enlisted man before entering the Naval Academy in June 1928. He was graduated in June 1932.

Before World War II, VADM Ward served on board the cruiser USS *Northampton* (CL 26) and the destroyer USS *Perry* (DD 340). He also studied fire control at Annapolis, and earned a master of science degree in electrical engineering at the Massachusetts Institute of Technology.

Vice Admiral Ward was gunnery officer of the battleship USS *North Carolina* (BB 55) through much of World War II. He was awarded two Bronze Star Medals for achievements during this assignment. He later served at the Naval Gun Factory in Washington, D. C., then assumed command of the destroyer USS *Hollister* (DD 788) in 1946. Subsequent assignments were with the Pacific Fleet Destroyer Force, again at the Naval Gun Factory, and, in 1950, command of a destroyer division in the Mediterranean.

During the next 10 years VADM Ward served with the Strategic Plans Division of the Navy Department in Washington, commanded a transport squadron supplying Arctic DEW Line bases, and then became the Atlantic Fleet's Deputy Chief of Staff for Operations and Plans.

In 1959 VADM Ward took command of Cruiser Division One in the Pacific. The following year he returned to Washington as Assistant to the Chief of Naval Operations.

After a year as an Atlantic amphibious commander, VADM Ward took command of Second Fleet in October. —**Jerry McConnell, JO1, USN.**

U. S. Naval Base, Guantanamo Bay

Almost every East Coast Navyman who has spent any time at sea is personally familiar with Gitmo, the informal term for the United States Naval Base at Guantanamo Bay, Cuba.

The base, which occupies some 45 square miles on the southeastern tip of Cuba, about 500 miles from Miami, is of importance as a year-round training area for Atlantic Fleet ships and aircraft. In addition, it is a part of the Panama Canal defenses and also an antisubmarine base.

Though primarily a training base, Guantanamo is strategically located and dominates the Windward Passage, a shipping route between the island of Cuba and Haiti. During World War II, control of this area was essential to the flow of fuel oil, supplies and troops.

Supporting the training activities are nine commands: Naval Station; Naval Air Station; Marine Barracks; Naval Hospital; Naval Dental Clinic; Public Works Center; Naval Supply Depot; VU-10; and a Mobile Construction Battalion.

Commander U. S. Naval Base, Guantanamo Bay, Cuba, oversees and coordinates all the above activities and is charged with the overall security of the base. As a part of this defense, all hands take part in a training program which reaches its climax each month in a ground defense exercise. Sailors, as well as Marines, fire rifles, machineguns and pistols; drill, and are trained in tactics. By the time a sailor has completed his 18 to 24 months' tour of duty at Gitmo, he is as well trained to fight ashore as the sailors of the Fleet are to fight at sea.

United States forces occupied the area in 1898, in the Spanish-American War, in which Cuba was liberated from Spanish rule. In 1903, the new Republic of Cuba leased the site, with an excellent harbor that can hold up to 50 large naval ships, to the United States.

The treaty was renewed in 1934, giving the United States a perpetual lease that can be nullified only by consent of both governments or if the United States chooses to abandon the site. The United States has taken the position that it would not waive its rights and would defend the base if it were to be attacked.

The original treaty set an annual rental of $2000 in gold coin, an indication of Cuban gratitude to the United States for having helped Cuba to win independence from Spain. It has been estimated that the value of the base is now more than $70,000,000. In January 1961, when the United States broke diplomatic relations with Cuba, the U. S. made it clear that it would continue to operate the base at Guantanamo.

OFF WE GO — Navy dependents board *USNS Upshur* at Guantanamo Bay. *Rt:* Tugs move *Upshur* from piers.

'You Have 15 Minutes

THE U. S. NAVY has long been a versatile outfit, and when all civilians were ordered evacuated from the Naval Base, Guantanamo Bay, Cuba, the sea service proved it again.

Between the Monday of the evacuation and the following Saturday, Navymen performed duties not normally required of men of the sea.

The evacuation involved more than 2800 Navy dependents and covered more than 1100 nautical miles. These people left their homes with from 15 minutes' to two hours' warning.

At Guantanamo on the Monday morning of the evacuation, mothers were cleaning house, washing dishes and clothes, shopping, or doing other routine chores. Most children were in school or playing at home. Navy husbands were on duty and Civil Service workers were at their offices.

About 1100, the morning routine was interrupted by phone calls or Navy messengers who told each family to pack one bag per person and be prepared to evacuate the base within 15 minutes. Some were given as long as two hours.

Mothers hastily threw clothing into suitcases, rounded up children and, if there was time, prepared the house for a long absence. Some, however, thought it was only another drill like those held from time to time in case it should become necessary to evacuate the base on short notice. This time, however, it was no drill.

ABOUT NOON, trucks picked up more than 300 civilians, mostly dependents of Navymen, and took them to the base airfield where they were checked aboard five C-130 transport planes and given an hour and a half to say goodbye to their husbands and fathers. Some dependents, whose husbands and fathers were on duty, did not get a chance to do even this. Then the planes took off for Norfolk.

At the same time nearly 2500 people were being checked aboard four ships—USNS *Upshur* (T-AP 198), USS *Duxbury Bay* (AVP 38), USS *Hyades* (AF 28) and USS *DeSoto County* (LST 1171).

Upshur was host to 1703 people, *Duxbury Bay* took 351, *Hyades* carried 286, and *DeSoto County* took 92 aboard.

Meanwhile, in Norfolk, Va., RADM James C. Dempsey, Commander Amphibious Training Command, U.S. Atlantic Fleet, and RADM Wallis F. Petersen, Commandant Fifth Naval District, were forewarned that evacuees were on the way and were to be cared for at the Little Creek Amphibious Base on the outskirts of Norfolk.

CAPT Nelson P. Watkins, commanding officer of the Little Creek base, began marshalling forces immediately, beginning with his wife.

"I called two women to lend a hand and before I knew it there were 30 volunteers," Mrs. Watkins said.

Barracks 3602, a modern steel and concrete structure at Little Creek, was readied to receive the first evacuees.

MONDAY NIGHT at 1805 the first of the five transports landed at the MATS terminal at the Norfolk Naval Air Station. By 2300 all the evacuee planes had arrived.

The lightly-clad and somewhat bewildered women and children who left the aircraft and stepped into the chill 51-degree air in Norfolk were met by Navymen and Navy wives who furnished warm clothing and blankets. Then the evacuees boarded buses which took them to the registration center and barracks at Little Creek.

After being assigned bunks and receiving bedding, wives and mothers began to make air, rail and bus reservations, using facilities set up in the barracks lobby by transportation companies with the permission of the Navy. Extra telephones in the barracks and a telegram desk helped evacuees to notify friends and relatives of whereabouts and plans. The base Navy Exchange set up a check cashing booth at the barracks, be-

SMALL FRY are tended to at Norfolk.

To Pack'

cause during the hasty departure many had no chance to obtain extra cash.

That night, sailors and Navy wives rocked babies to sleep, helped with diaper changes, feeding, and other baby-sitting chores while weary mothers got a few hours' rest. Navy stewards mixed formulas for more than 30 babies throughout the night and the following day.

By Wednesday morning all but a handful of the airlifted evacuees had left Little Creek and Norfolk for home towns and friends in the U.S. All transportation, phone calls and telegrams were paid for by the Navy.

Wave LT Phyllis Schultz, who was the officer in charge of caring for the airlifted evacuees, commented the morning after they arrived, "Believe me, everybody and his brother was working last night."

BUT THE BIGGEST JOB still lay ahead. Nearly 2500 evacuees aboard the four ships were berthed in every available space and making the 1100-mile voyage from Guantanamo to Norfolk,

Before the ships left Guantanamo, the people aboard received these messages:

"To you who have had to leave your homes at Guantanamo I send my deep regrets. I know you do so with sadness, for some of you also

HERE WE ARE — Evacuees from Guantanamo Bay Naval Base leave ship at Norfolk and (below) are assisted in arranging further transportation.

SIGNS OF THE TIMES — Personnel of Norfolk Naval Supply Center stand by at pier side to welcome Navy dependents evacuated from Cuban base.

leave behind your husband, others your father—and you who have been civilian employees are uprooted from your jobs as well as your homes. It is my most earnest hope that circumstances will permit your return. I send my warmest greetings and best wishes to you and those you leave behind. (Signed) *John F. Kennedy.*"

And ADM George W. Anderson, Chief of Naval Operations, sent this message:

"The calm and serene manner in which you have accepted the threat of possible personal danger while living at Guantanamo has been viewed with admiration and respect. Now our judgment dictates that you should leave the scene of an increasing danger to your own safety. I am sure you will accept this action with the same fine spirit that has been so obvious throughout your stay at Guantanamo. Rest assured that we will do all possible to provide for your welfare in the days ahead. *George Anderson.*"

In replying for the Navy families, RADM Edward J. O'Donnell, Commander of the Guantanamo Bay Naval Base, sent the following message to ADM Anderson:

"I was able to read your kind and warm message over ships' loudspeakers to our people embarked in *Duxbury Bay* and *Hyades.* Was not quite agile enough to make *DeSoto County.* The whole evacuation went very well and amply bore out the kind things you said in your message."

IT WAS ONLY AFTER the evacuees had been settled aboard ship that they realized their situation and tears came to the eyes of the women. But the wives and mothers worked out a shipboard organization.

Aboard *Upshur,* with the help of the crew and Army troops who had been aboard at the time the ship was diverted to pick up evacuees, the mothers organized into watch sections. While on duty they wore Corporal of the Guard and Sergeant of the Guard armbands.

The Corporals and Sergeants of the Guard were charged with mixing baby formulas, watching over children while mothers slept, and assisting in making all as comfortable as possible.

Two formulas were used for all 200 babies aboard *Upshur* and all did quite well, according to one of the ladies in charge.

Teen-aged boys were drafted for mess cooking duty and alternated between galley details and work in their compartment near the stern of the ship.

In Norfolk, arrangements for the care of the evacuees arriving aboard ship were placed under the joint control of RADM Petersen and RADM Dempsey, with assistance from Navymen attached to the Norfolk Naval Base, the Little Creek Amphibious Base, and other area commands.

ON WEDNESDAY MORNING following the arrival of the first evacuees by plane Monday night, Norfolk area commanders met to coordinate plans for care of the people due to arrive by ship on Thursday.

Transportation officers were to see that Navy buses were on hand in force so that evacuees would have a ride from pier 12 on the Norfolk Naval Base to the barracks at Little Creek. Other buses were to meet ships coming into the quay wall piers at Little Creek.

It was decided to send customs, agriculture and immigration officials aboard the evacuee ships by tug at Cape Henry so that there would be no delay in discharging the passengers when the ships moored.

Other plans for the care of the evacuees were completed and immediately after the conference adjourned, the preparations swung into high gear.

CAPT Frederick Wahlig, commanding officer of the Norfolk Naval Base, spoke to local merchants and clothiers, informing them of the need for warm clothing for the evacuees, and how it would be distributed.

Upshur had forwarded information

Navy Wives Praised for Their Courage and Spirit

"I think that the great theme in any story about the evacuation should be the enormous steadiness and self-reliance of our Navy wives.

"I had never thought very much about it in the past, but close association here has made it clear to me that the wives of our Navymen absorb the quality of self-discipline and are strengthened by the same processes that go into the formation of a first-class sailor. The wives showed a toughness of spirit and a no-panic attitude which must be a source of pride to the service and to the country."

Such were the sentiments expressed by RADM E. J. O'Donnell, USN, Naval Base Commander at Guantanamo, in an exchange of letters with VADM W. R. Smedberg, III, USN, Chief of Naval Personnel.

VADM Smedberg concurred most heartily, and added: "One of the great strengths of all the services is the wife who accepts the many sacrifices she is called upon to make because of her understanding of her husband's part in insuring the security of our nation."

on the number of men and women, the number of teen-aged boys and girls, and the number of small children and babies among the passengers in a message to naval commands at Norfolk. From this information it was possible to determine the approximate quantity and sizes of the clothing that would be needed.

NORFOLK AREA MERCHANTS and clothiers, civic clubs, and citizenry responded to the appeal for clothing, donating in such quantity that the distribution center in the Rockwell Hall gymnasium at Little Creek was soon overflowing.

Teams of women volunteers and Navymen sorted coats, sweaters, slacks, shoes and other garments, arranging them by size on tables and racks in the gymnasium.

Navymen also set up registration desks in Rockwell Hall. Desks for each letter of the alphabet were arranged in rows. Letter signs were made so that evacuees could go to the desks that corresponded with the first letter of their last name. After registering, each family was to be assigned bunks in either barracks 3601 or 3602. Before leaving Rockwell Hall, the people still needing clothing could select it from tables and racks.

In the lobbies of the barracks, as in the case of the airlifted evacuees, check cashing services; air, rail and bus reservation desks; telephone booths; wire services; a nursery; a diet kitchen for mixing babies' formulas; a Navy Relief officer; chaplains' assistance; and other aids to tired travelers were set up.

Nearly 40 extra telephone lines into Little Creek were set up to handle the anticipated barrage of calls when the evacuees arrived.

THURSDAY MORNING Little Creek Naval Base's skipper, CAPT Watkins, called a meeting of Navymen and Navy wives to go over last minute details for the handling of evacuees.

At 0945 Thursday morning, customs, immigration and agriculture officials left for Cape Henry and *Upshur*.

Earlier, about 0800, USS *Opportune* (ARS 41) and USS *Shakori* (ATF 162), had rendezvoused with the arriving ships and highlined winter clothing so that evacuees would be ready for the chilly weather at Norfolk this time of the year.

CHIEF of Naval Personnel, VADM W. R. Smedberg III, USN, is interviewed at Pier 12, Norfolk Naval Station, while waiting to greet Navy dependents.

By 1400 Thursday, about 500 Navymen, Marines and civilian volunteers were gathered at pier 12, Norfolk Naval Base, to greet *Upshur* and assist the evacuees.

VADM William R. Smedberg, III, Chief of Naval Personnel, was on hand to welcome *Upshur*, along with RADMs Petersen and Dempsey.

Upshur arrived at 1445 while the CINCLANTFLT band played and women and children waved flags. Apples, bananas and comic books were distributed to children as they boarded buses for Little Creek. Sailors and Marines carried babies and baggage to buses and answered questions asked by anxious evacuees. As each bus was loaded, it left immediately for the reception center.

All Navy League auxiliaries in the Norfolk area had volunteer workers at the reception center and barracks. Red Cross Gray Ladies worked in shifts Thursday night and Friday and it was not uncommon to see a Navy Wives Club volunteer, a Red Cross Gray Lady and a sailor sitting or standing side by side in the nursery rocking babies to sleep while a weary

MOVING DAY — Three young ladies catch up on their reading on pier at Gitmo while waiting to board ship that will take them to the U.S.A.

LET'S EAT — A Navy wife feeds her baby, evacuees eat Navy chow and lad enjoys candy bar at Little Creek.

AT SEA — A box of clothing is highlined to LST *DeSoto County* a few hours before she made port.

mother made phone calls, took a nap or made transportation reservations.

Local hospitals donated more than 300 cribs to be used in the barracks nurseries.

SHORTLY AFTER 2100 Thursday night, *Duxbury Bay* moored at the quay wall at Little Creek, followed by *DeSoto County* a few minutes later. Before the hour had passed, *Hyades* discharged her passengers at pier 12 in Norfolk and 729 more people from the three ships were flowing into Little Creek.

At one time Thursday night, there were 240 babies in cribs in the nursery on the second floor of barracks 3602.

A temporary public information office was set up in Barracks 3602 to answer questions about friends and relatives phoned in from all over the country, and to assist media representatives in their coverage of the operation.

By midnight Thursday night, the majority of evacuees had received their bunk assignments and were settling down for the night.

Friday morning saw many of the evacuees leave Norfolk by air, rail and bus paid for by the Navy.

By noon Friday, it was determined that 2387 people had registered at Rockwell Hall. Two hundred seventy adults and 533 children had been given beds. Others had been met at the pier by friends and relatives and had not registered at Rockwell Hall, but altogether more than 2800 people had been evacuated from the Naval Base, Guantanamo Bay, Cuba.

The Little Creek mess hall stayed open around the clock Thursday and Friday to feed both evacuees and volunteer workers.

Those people who did not have places to go in the U.S. were given Navy housing in the Norfolk area. But these were few indeed.

To indicate their appreciation, one organization of enlisted wives stationed at Guantanamo Bay, Cuba, presented the following letter to Navy Relief and Red Cross officials at Little Creek. It represented the sentiments of all:

"To: The Navy Relief Society and the American Red Cross

It is requested that the money in the treasury of the Enlisted Wives' Winter Bowling League of Guantanamo Bay, Cuba, at the time of our evacuation ($269.80) be donated to the Navy Relief Society and the American Red Cross and be divided equally between them in appreciation of the wonderful treatment that we received from them on arrival in Norfolk, Va.

May it be used to further the mission that is theirs and to help others in need.

Thank you for the many thoughtful and kind deeds extended to each of us. May God bless you."

By noon Saturday, most of the evacuees had left Norfolk. Sailors ended their collateral duty babysitting chores and the Norfolk naval activities resumed their regular duties in support of the Fleet.

— Jim Lewis, JO2, USN.

Fire-Fighting School

YOU'RE ON BOARD a Navy ship steaming hundreds of miles at sea when the general alarm is sounded. It could be the beginning of another routine drill. But, on the other hand, a disastrous fire could be raging deep inside the ship. If you and your shipmates haven't learned the technique of fire-fighting by this time—it could be too late.

The best method for teaching the art of fire-fighting is, of course, to create a fire for trainees to fight. This could be a bit messy aboard ship—and besides, the Navy doesn't like to put its ships and crews in danger just for drill. However, at the Fire-Fighting School, Fleet Training Center, Norfolk, Va., facilities are available for duplicating shipboard fires, and actual fires can be combated.

Courses taught at the school range in length from two to five days.

The fire prevention course, which takes five days, is designed to qualify officers and senior petty officers to inspect ships for the elimination of common and unnecessary fire hazards.

The five-day course in fire-fighting shows students the proper methods of combating various types of fires they may encounter, and teaches them to work as a team. Instruction includes the use of high and low velocity fog, mechanical foam, oxygen breathing equipment, and procedures to be followed when nuclear and high-explosive weapons are involved in fires. A similar course is designed for fighting aircraft fires and for pilot rescue.

In addition to training U. S. Navymen, the school often opens its facilities to firemen of municipal and volunteer fire departments, shipyard firemen, the U. S. Army, the U. S. Air Force and to allied naval personnel.

Clockwise from top: (1) Backed by his shipmates, a student at fire-fighting school tries his hand at rescuing the "pilot" of plane engulfed by flames and smoke; (2) and (3) students fight fire in a jet aircraft and rescue the "pilot" during simulated flight deck crash; (4) foam is used by students at fire-fighting school to cool a simulated nuclear weapon surrounded by fire.

HIGH HATS — Hats of high ranking NATO officers tabled during meeting are symbolic of the organization.

International Navy

The attention focused on Norfolk, Va., in recent weeks has apparently not gone to the heads of the city's 250,000 inhabitants, many of whom are Navymen. Before the United States quarantined the delivery of arms to Cuba, and called on Norfolk-based naval units to help enforce the quarantine, Norfolk was a quiet, folksy community. It still is.

The civilian population of Norfolk goes about its business in its usual calm, quiet manner.

Norfolk's Navy residents, who are there in compliance with military orders, likewise tend to their duties in a calm, quiet manner.

Norfolk is a U. S. Navy town. It is the home of several top U. S. Atlantic Fleet commands, including the Fleet's over-all commander. Norfolk is the base for the U. S. Second Fleet, the Atlantic's Amphibious and Service Forces, and others.

Norfolk is also an international Navy town.

TEAMWORK — Flags of member nations fly before SACLANT Headquarters.

Last April the North Atlantic Treaty Organization's Allied Command Atlantic (ACLANT), with headquarters in Norfolk, observed its 10th anniversary. ACLANT is the first international ocean command ever established on U. S. soil. It is muscle on the arms of NATO's 15 member nations (Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Turkey, United Kingdom and United States).

ACLANT was created in 1952 to provide NATO with sea and land forces and to see that the Atlantic shipping lanes used by the NATO nations are kept clear in wartime.

In times of peace, ACLANT is essentially a planning headquarters. No forces are permanently allotted it. However, during wartime, ACLANT would have at its disposal more than 500 ships and 1400 aircraft of all types, representing the largest naval force in the world.

On the ACLANT staff in Norfolk are 140 Army, Navy, Air Force, and Marine officers from Canada, Denmark, France, the Netherlands, Norway, Portugal, the United Kingdom and the United States. These nations, plus West Germany and Italy, also have national liaison representatives assigned to ACLANT. Rounding out the peacetime complement are 150 U. S. Navy enlisted men of the flag allowance of Admiral Robert L. Dennison, USN, the present Supreme Allied Commander Atlantic (SACLANT). Admiral Dennison is also the Commander in Chief, U. S. Atlantic Fleet. (See page 4.)

Deputy SACLANT is a flag officer of Britain's Royal Navy, presently Admiral Sir Charles Evans, RN.

PRESIDENT Kennedy and Vice President Johnson pay visit to SACLANT.

ACLANT's area of responsibility extends from the North Pole to the Tropic of Cancer, and from the coastal waters of North America to the shores of Western Europe and Africa.

The power potential of ACLANT is the combined strength of her eight member nations. These countries have agreed to maintain sufficient forces in readiness that can, among other actions:

- Deploy hunter-killer forces capable of destroying a large submarine fleet.
- Direct a striking Fleet that includes submarines armed with *Polaris* missiles.
- Protect any allied transoceanic convoy system.

ACLANT is divided into two geographical command areas officially known to NATO as the Western Atlantic Area and the Eastern Atlantic Area. Within this framework, three principal commanders direct planning and operations. These are the Commander in Chief, Eastern Atlantic Area; Commander in Chief, Western Atlantic Area; and the Commander, Striking Fleet.

Admiral Sir Wilfrid J. W. Woods, RN, is CINCEASTLANT. His headquarters are in Northwood, England.

Admiral Dennison is CINCWESTLANT.

Commander of the Atlantic Striking Fleet is Vice Admiral John McN. Taylor, USN.

Striking Fleet headquarters is the tactical command ship USS *Northampton* (CC 1), homeported in Norfolk. *Northampton* is the Navy's only tactical command ship. (Since she was commissioned in 1953, *Northampton* has served as flagship for a variety of Atlantic commands. The CC is fitted with an elaborate communications facility and combat information center, and SPS-2 radar—the world's largest sea-going radar installation.)

The Striking Fleet was established under ACLANT in November 1952, as a multi-nation naval force. Its mission is to meet the specific wartime needs of NATO and national commanders in containing any potential aggression by land, sea or air. The Striking Fleet is a balanced force of combat and non-combat ships, the core of which is the fast carrier task force.

All allied units which serve with ACLANT are so designated, while remaining under the strict control of their respective nations. NATO forces are made available for periodic training exercises, coordinated by ACLANT, designed to weld together the allied fighting force.

Problems concerning communications barriers, the standardization of equipment and material, and countless other problems, are solved by the ACLANT staff. Principal staff work is the formulation of plans, improvement of techniques, and perfection of new developments.

The solution of problems, and allied coordination and military practice, are achieved through combined training operations which vary from small scale antisubmarine drills to NATO-wide exercises every three years. One major training campaign of recent years, Operation Sword Thrust (1960), required the use of more than 60 ships, 400 carrier aircraft, and 35 land-based patrol craft. The nucleus of the operation was a NATO Striking Fleet that included

ATLANTIC Striking Fleet Headquarters is located in USS *Northampton* (CC 1).

NAVYMEN of organization members work together. *Left:* French ship makes port at Norfolk, Va. *Rt:* Greek navymen attend DC classes at Norfolk school.

the United States carriers *Saratoga* (CVA 60), *Essex* (CVA 9), and *Shangri La* (CVA 38), and the United Kingdom carriers *Ark Royal* and *Hermes*.

Operation Sword Thrust covered in detail every maneuver of defensive and offensive tactics, from sea and air battles and swift strikes at subs to the amphibious assault of beachheads. Support for the Striking Fleet was provided by USS *Boston* (CAG 1), *Macon* (CA 132), *Northampton* (CC 1), the United Kingdom cruiser *Gambia*, and the Dutch cruiser *De Ruyter*. France and Norway provided submarines. Canada furnished destroyers. United States and Royal Air Force maritime patrol aircraft worked with the surface units. Other ACLANT nations provided forces to portray the enemy.

The idea of Sword Thrust, and all ACLANT training maneuvers, is to mold an allied force that can respond as a single command.

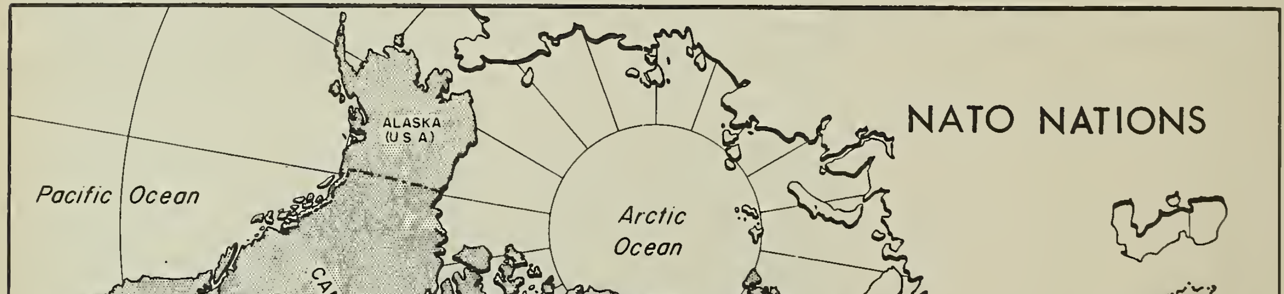
A sharp sense of teamwork is in evidence at ACLANT headquarters in Norfolk. There is a genuine feeling of unity. The visiting allied officers and their families know they are here on a historic and important mission. The permanent residents of Norfolk realize this and have welcomed them to their community.

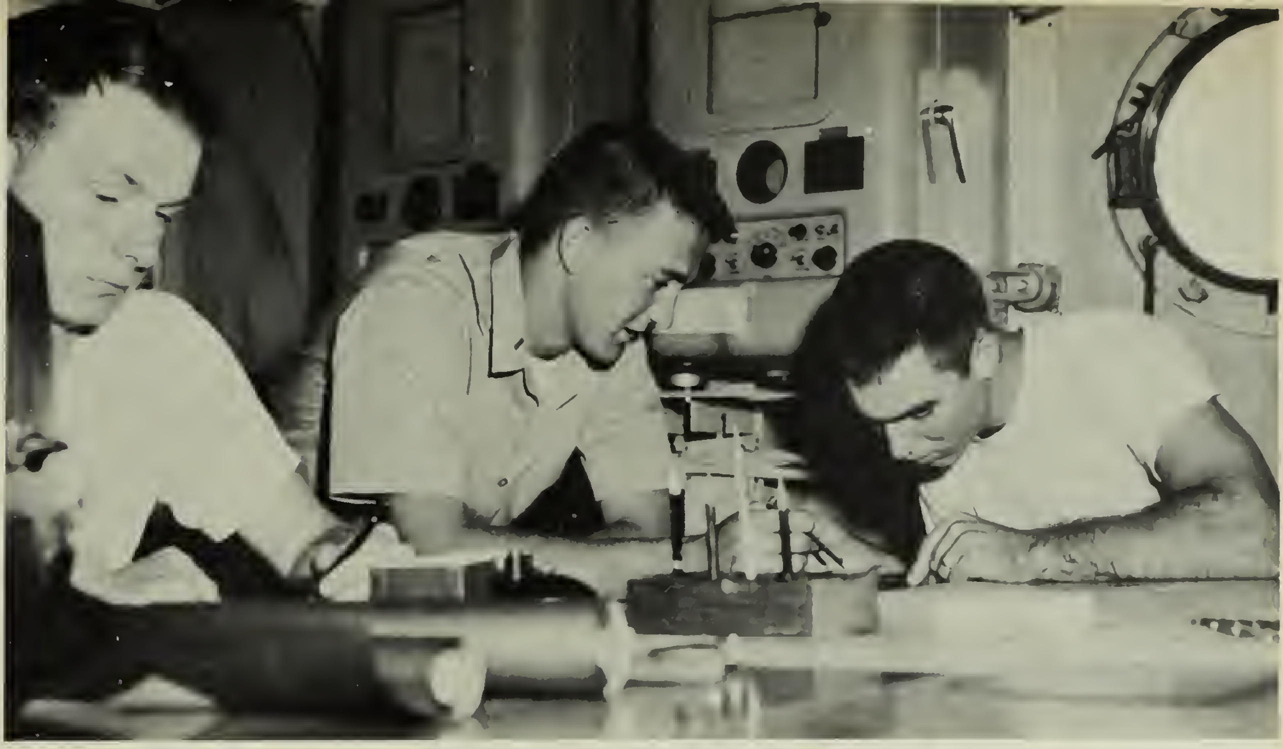
ACLANT headquarters is a group of brick buildings on Hampton Boulevard behind the Armed Forces Staff College. In front of the main building is a semi-circular driveway dotted with 15 flag poles that fly the national ensigns of the NATO nations. The flags are displayed during daylight hours and rotated daily in a clockwise direction, except for the host U. S., which is always flown from the pole on the extreme left of the display.

In the center of the semi-circle is a limestone pillar which supports a bronze plaque emblazoned with the Seal of Norfolk and the ACLANT Seal. It reads, "Presented by the citizens of Norfolk to commemorate here the establishment on April 10, 1952, of the Allied Command Atlantic of the North Atlantic Treaty Organization." The plaque was presented to ACLANT in 1954 by the mayor of Norfolk.

Today, the continuous efforts of ACLANT insure that the naval arm of NATO is ready to carry out whatever may be required to defend the Atlantic. ACLANT is prepared to defend the Atlantic as far forward as possible, and provide close-in protection of trans-Atlantic air lanes. She has at her disposal the men, ships, aircraft, and weapons, to do the job.

— Dan Kasperick, JO1, USN.





HERE WE ARE — Crew members plot ship's position. *Below:* Supplies are lifted to survey team ashore.

Surveying Ship

NAVYMEN ON BOARD USS *Maury* (AGS 16) hauled in their anchor in October and pointed the bow of their ship toward the Gulf of Siam. It was the beginning of *Maury's* fourth trip to the gulf where her men collect information on the winds, tides, currents and the depth of Siamese salt water. Along with *Maury* went USS *Serrano* (AGS 24), making her third trip.

Maury is named for LT Matthew F. Maury (1806-1873) who was a pioneer in the scientific collection of hydrographic data during the period immediately preceding the Civil War.

LT Maury's namesake carries on his work. While she is charting the waters of the Gulf of Siam, she will be aided by modern navigation systems (LORAC and SHORAN) which give her exact position—an invaluable aid to charting which LT Maury didn't enjoy.

She also carries echo-sounding devices, which produce accurate bottom profiles of the ocean floor at great depths, and is provided with photographic, engraving and printing facilities to produce charts, forms and other navigational materials.

She has a helicopter flight deck and carries two 52-foot boats which she dispatches to take soundings in shallow or restricted waters.

Maury's cruises often last for from seven to eight months. During a typical one, she may steam over 12,000 miles and make more than 15,000 depth soundings to collect the necessary information to complete a survey.

SURVEY TEAM member sets gear to record tide in Gulf of Siam. *Rt:* USS *Maury* (AGS 6) cruises Pacific.

TRAIN WRECK in Pennsylvania was scene of leadership and heroism as demonstrated by a Navy drill team.

LOM for Leadership

THE LEGION OF MERIT—the fifth highest decoration the United States can bestow upon a member of its armed forces—is sometimes abbreviated LOM. Those three initials could also stand for Leadership of Men.

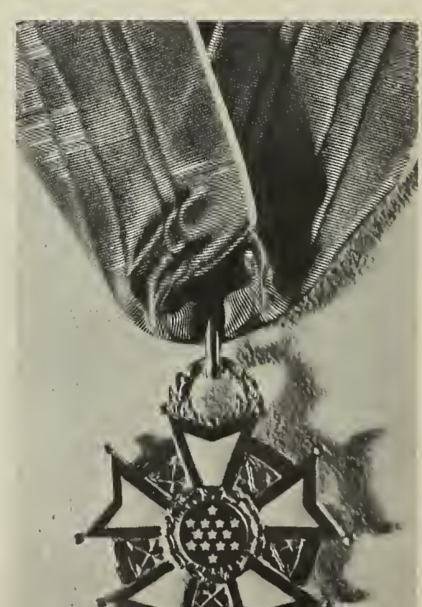
This is the story behind the recent award of the Legion of Merit to Radioman Seaman William D. Hodges, USN.

The award of an LOM to an enlisted man is rare in itself. Its presentation to one as junior as Hodges may be (as far as available records of the Navy Department's Board for Decorations and Medals show) without precedent.

It all began peacefully enough on a sunny afternoon in eastern Pennsylvania this past summer.

A nine-car "baseball special" loaded with holiday-minded fans and gay family groups was rocketing up the tracks for Philadelphia. Aboard the train thoughts were mostly on the hours ahead—a fine relaxing night at the old ball park, rooting the local favorite Philadelphia Phillies home. It had been a nice smooth ride up from Harrisburg, Pa., where most of the passengers had boarded.

THEN, SUDDENLY and without warning, something happened. Just opposite the huge Bethlehem Steel Plant at Steelton, Pa., where the tracks curve around a bend of the Susquehanna River, three cars lurched off the rails, ripped loose from the rest of the train, and plunged down a 25-foot embankment. They landed on their sides in two to three feet of water at the river's edge.



A few minutes after the derailment, a Navy bus pulled to a stop at the traffic light outside the main gate of the steel plant. Aboard it were 27 members of the Class "A" Radioman School Drill Team from the Naval Schools Command, U. S. Naval Training Center, Bainbridge, Md.

Nineteen of the group, including Hodges, were seaman apprentices. The other eight were seamen. They were returning to their base after participating in a parade in nearby Port Royal, Pa. The bus driver was Constructionman Apprentice Thomas E. Farrell, USN.

Chief Radioman John G. Conner,

drillmaster of the team, had ramrodded the group during its appearance in the parade. He had decided to return to Bainbridge by auto, however, and had placed the team under the direction and command of Assistant Drillmaster Hodges for its return trip to its base.

From their bus, the Navymen could see a sizeable crowd gathering around the steel plant gate. Then a couple of ambulances careened by, sirens screaming.

PUT YOURSELF, at this point, in young Bill Hodges' shoes for just a few minutes. What would you have done?

Hodges had been ordered to return himself and his charges to Bainbridge just as expeditiously as the speed laws allowed. They were expected back there—what would be the reaction if they didn't show up when they were supposed to? Did he have any authority to do anything else? And what about the possibility of injury, or worse, to members of his group?

If you're a top-grader or an officer, the answer may seem plain to you. Remember, though, that Hodges was a youthful SA, with just a few months' naval service behind him.

Leadership—briefly, the exercise of effective organization, supervision and control over one or more men and the directing of them to the successful accomplishment of a task or mission—is an exacting art, and an honored one. It is especially important in the armed services, where discipline, the very lifeblood of any military organization, is born and nurtured by effective leadership.

Most of us know that it is not especially difficult to lead and supervise—*when we have been given a direct order to accomplish a certain mission and more or less explicit ground rules to follow.*

In the absence of any explicit instructions or superior authority, however—when you're faced with the necessity to act, or not act, entirely on your own—the whole deal takes on a much different color.

Hodges didn't hesitate for long. He retained, as we shall see a little later, some private doubts of his own. Human beings were suffering and probably in need of help, however, and to him this consideration transcended all others in importance. He ordered the drill team to debark and led his men, double-time, to the accident scene.

LET'S LET A SECTION of the official Navy report of the incident tell the next part of the story:

Upon arrival at the scene, at about 1715, Hodges noted that there appeared to be many injured and that, as yet, there was no organized rescue effort underway, although there were large numbers of curiosity seekers milling around.

Although only a seaman apprentice, Hodges decided to retain himself and his men at the scene in order to provide any possible assistance. Unable to identify anyone who appeared to be attempting to organize rescue work, he disposed his team in the first organized rescue effort. He placed some of his men in and around the coaches to bring out injured, others to stretcher details, and still others to security details to keep away curiosity seekers. Although many other rescue workers became ill from the effects of seeing the dead and dying, every man of the drill team worked continually until about 2000, removing the injured.

At about 2000, having determined that there were no further injured in the coaches, and not knowing what

FINE WORK of the Navy drill team in removing the accident victims helped to keep down the death toll.

TEAM WORK—Members of Radioman A School Drill Team at NTC Bainbridge, Md., wound up as rescue crew.

more he could do, Hodges mustered his men preparatory to returning to Bainbridge.

At that point, however, Captain Richard D. Gray, Pennsylvania State Police, asked him to hold the drill team in readiness to remove the dead when the coaches were raised from the water. This phase of the rescue operation continued until 0200 the next morning, when the team left for Bainbridge.

In all, the team had worked for more than eight hours under severely trying conditions. The final toll of casualties was 19 dead, more than 100 injured. The arrival and prompt action of the drill team undoubtedly were instrumental in keeping the death toll at such a low figure.

YOU THINK HODGES and his troops weren't doing a job? An Air Force major from a nearby base arrived at the scene of the accident soon after the Navymen swung into action. He was so impressed by the teamwork and discipline of the drill team, and by the obvious control Hodges was exercising over the actions of his men that he refused to take over as senior officer present, and instead offered his services to Hodges.

Here is the statement of MAJ A. W. Runser, USAF, of the 3502ND USAF Recruiting Service, Olmstead AFB, Pa.

"I arrived on the scene of the train wreck shortly after the news of it had spread. I had gone in civilian clothes, but upon returning to the base to arrange for additional rescue equipment, I got into uniform in order to get through police lines more easily. I noted the Navy team working at the scene, so I went to Hodges, the man in charge, and told him I would do anything for him that I could.

"Hodges was particularly concerned that he had done the right thing by staying to help. I assured him that he had. He was also concerned about the condition of his team's uniforms (they were wearing dress whites); that their appearance might be considered disgraceful when they returned. I reassured him on that point, too.

"I do not know when the drill team arrived on the scene, except by hearsay. I do know, though, that Hodges handled his men in a manner of which the Navy should be extremely proud. I do not believe he was ever given any direct supervision or a positive order; he seemed instinctively to do the right thing.

"He had men assigned to rescue details, working in the cars and in the river; to stretcher and handling details, hauling the dead and injured up the embankment. This was a strenuous task, since the stretchers had to be brought up a 25-foot slope. He also had men assigned to security details to keep back the crowd. He always seemed to have the welfare of his men in mind, and, when one appeared to be reaching the limit of his endurance, would place him on a less strenuous detail and replace him with someone who had been rested.

"It was very difficult to pick out any one man besides Hodges who was doing an outstanding job. They all worked as long as there was work to be done. In spite of the terrible sights and the cries of the injured, not one man failed to do his job, a record of which the Navy should be proud.

"I have nothing but praise for the Navy boys, and the training you have given them."

TO THE RESCUE—Navymen, joined by others, remove injured from cars.

FINALLY, there is the letter from Captain Richard D. Gray, commander of the Pennsylvania State Police unit at the scene, to the CO, Service Schools Command, NTC Bainbridge:

"I wish to take this opportunity to thank you for the excellent cooperation and assistance rendered by a detail of U. S. Navy personnel on the occasion of the major train wreck in Steelton, Pa., on 28 Jul 1962.

"The successful evacuation of the injured and dead was, in a large part, the result of their outstanding performance. Consequently, I feel the Commonwealth of Pennsylvania and the Pennsylvania State Police were extremely fortunate in having the splendid and capable assistance of these young sailors. Their position as members of the armed forces is too often taken for granted and thankless. And, while the deed did not involve great physical danger, they did serve with dignity, honor and respect for their uniform to a degree of physical exhaustion.

"I compliment you on the fine caliber of your personnel, their unquestionable ability, alertness and desire to be of service in the interest of public safety. I feel, too, that the individual who gave the final order for assistance deserves an extra pat on the back, because of the possible repercussions had he made a wrong decision.

"On behalf of our entire detail I congratulate the personnel of your command, and particularly those men whose conduct during this operation brings such credit to themselves and to the United States Navy."

OTHER EVIDENCE revealed that two other members of the team rated special praise for their actions.

Seaman Apprentice Michael J. Pierce discovered a small boy in one of the overturned cars, trapped by wreckage atop the body of his dead father. The lad's leg was pinned outside the window, underneath the side of the coach. For 45 agonizing minutes Pierce held the boy in his arms and talked (baseball, and especially Mickey Mantle, were favorite topics) while others worked to jack the car up enough to free him. As he gained the youngster's confidence and attention, he was able to reduce his shock and near-hysteria, and to keep him from noticing what had happened to his father. Several observers feel that Pierce's action probably saved the boy's life.

Seaman Carl W. Willeford worked himself into a state of utter exhaustion, but stuck it out to the end, and then collapsed, unconscious. When first efforts failed to revive him, he was taken to Olmstead AFB Hospital, where he later regained consciousness. He was kept at the hospital overnight for rest and observation, and returned to his base the next day.

As originally submitted through the chain of command, CO Service Schools Command recommendation called for Navy Commendation Medals for Hodges, Pierce and Willeford, and Letters of Commendation from CO, NTC Bainbridge, for the others. These recommendations cleared with approval through CO, NTC Bainbridge; Commandant, Fifth Naval District; the Chief of Naval Personnel, and the Chief of Naval Operations, until they reached the Navy Department Board of Decorations and Medals.

This Board, after sifting all available evidence, and after due deliberation, reached the conclusion that the recommended awards were not enough.

HERE IS AN EXCERPT from the Board's final recommendation to the Secretary of the Navy.

"The leadership and initiative demonstrated by Hodges was so far above that which could be expected of a person of his rate and experience that the Navy Commendation Medal is considered inadequate to provide appropriate recognition in his case. The Board therefore recommends that Hodges be awarded a Legion of Merit to afford this young Navyman the appropriate degree of recognition his outstanding performance deserves.

"The Board further recommends the award of the Navy Commendation Medal to Pierce and Willeford. It further recommends that the other participating members of the drill team—Seamen Andrew Flatley, Charles H. Fritz, Dennis J. McManus, Donald R. Peterson, Robert T. Rosensteel, Kenneth C. Shee and Lloyd M. Williams; Seaman Apprentices Gerald S. Burnette, Charles A. Dew, Donald T. Ellis, Gilbert D. Giles, Charlie N. Hancock, Kenneth E. Horton, Charles N. Hughes, Joseph J. Kelly, James A. Kohl, Arthur E. Lavoie, Joseph J. Lofano, John F. Machado, Steven Marino, Walter J. Montgomery, David E. Myers, Jack D. Radcliffe and Howard C. Thunnell; and the driver of the bus, Constructionman Apprentice Thomas E. Farrell—be awarded Letters of Commendation from the Secretary of the Navy in recognition of their meritorious performance under very trying conditions."

On 12 Oct 1962, SecNav approved "with pleasure" the recommendations of the Board.

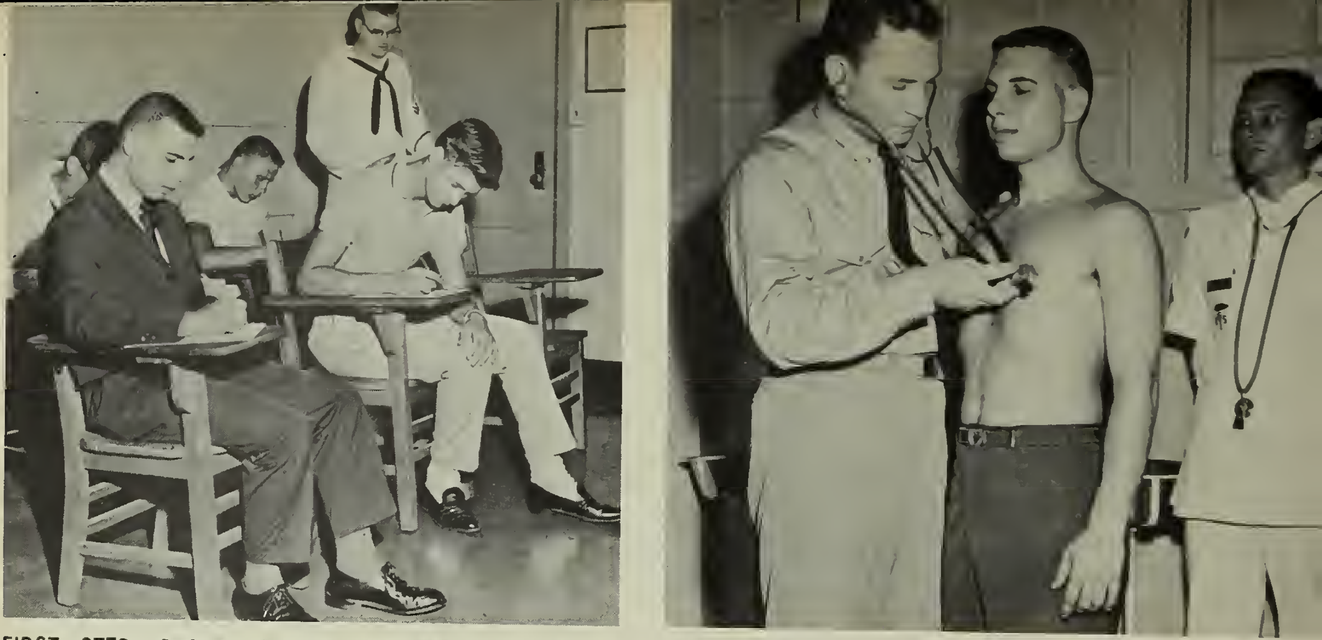
Hodges and his fellow drill teamers have graduated from school, and have scattered to their respective ships and stations. They will be presented their awards in ceremonies at their duty stations.

Theirs was an experience that will never be forgotten by any of the persons involved. It is to their everlasting credit that in an emergency they reacted like men—and good Navymen.

—Jerry McConnell, JO1, USN.

MEDAL MEN—M. J. Pierce *(left)*, team leader W. D. Hodges *(center)*, and C. Willeford *(second from right)* received medals for their actions.

SAD SCENE—W. D. Hodges, RMSN, stepped in and directed rescue, showing leadership and initiative that were rewarded with the Legion of Merit.



FIRST STEP—Before signing up there is paper work, tests, and a physical examination to be taken.

THIS IS A DRILL

YOUR PULSE QUICKENS slightly as you mount the steps. Ahead of you, two sharp-looking whitehats salute the quarterdeck and head briskly down the passageway.

You pause for a second or two, then enter. The JOOD asks your business. Soon you are seated across a desk from a Naval Reserve recruiter and, before long, you emerge a seaman recruit, USNR-R. You will have enlisted for a six-year hitch, two years of which must be full-time active duty.

It's not quite as simple as that, of course. There is the tedious but important paperwork to complete. There are aptitude tests—the Navy's Basic Test Battery—a local record check and a physical exam to pass. Finally, if you are found to be qualified, you are sworn in to the USNR.

But your processing is not over. There are interviews, immunization shots, and more interviews. You are fitted out in your naval uniform.

In some instances, you may take special radio and/or sonar tests to determine whether you are qualified for rate training in such fields.

Once your basic qualifications have been determined, you will be assigned an appropriate NEC trainee code. And you're on your way.

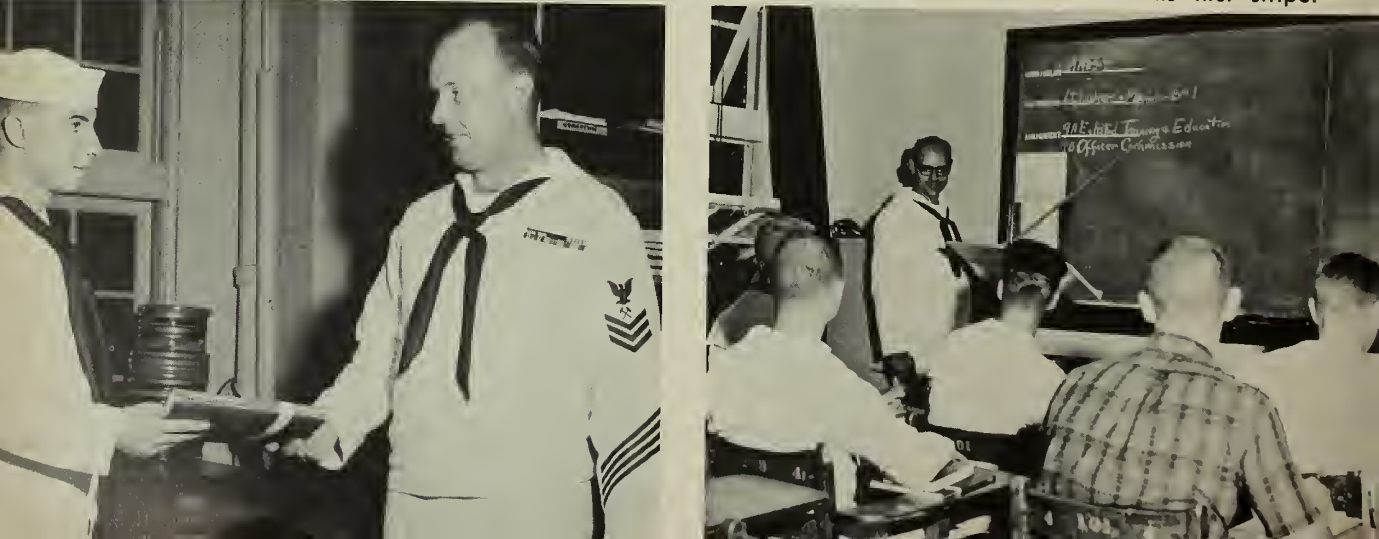
You've joined a surface division which is part of the Active Fleet Augmentation Component of the Selected Reserve. If so, your unit may schedule 48 weekly drills or 12 weekend drills a year, and its members will take part in 14 days annual active duty for training (ACDUTRA).

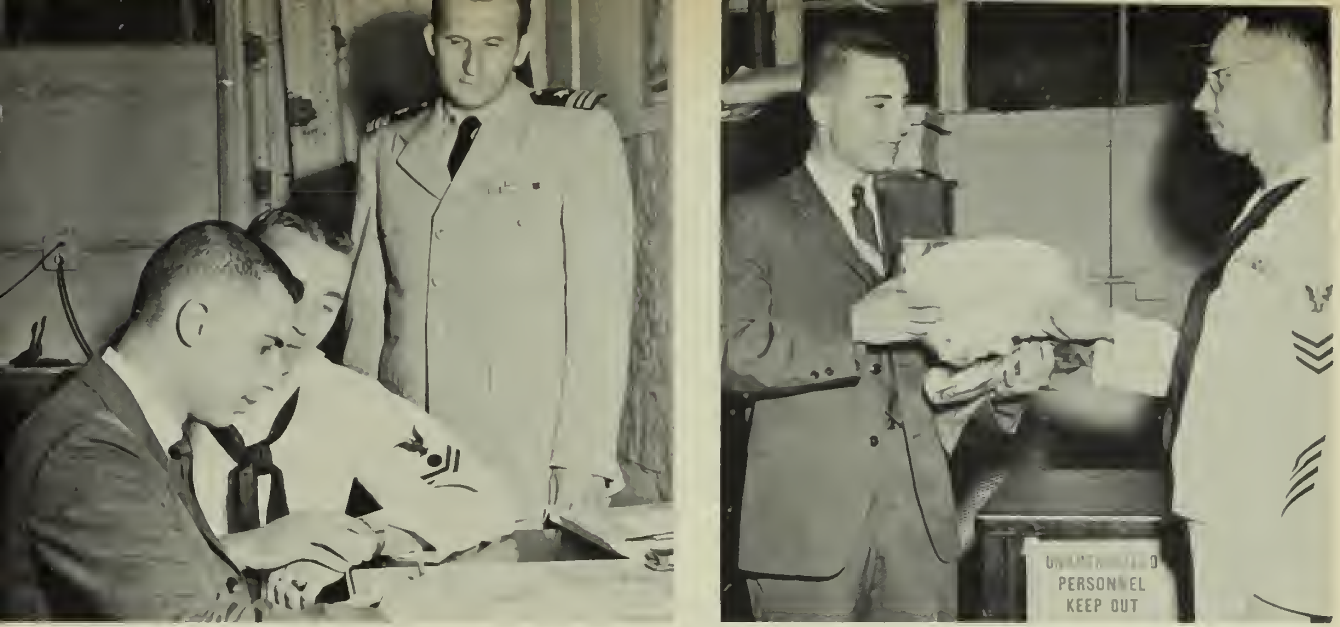
YOURS IS A "MEDIUM" surface division, which means it has an allowance of 150 enlisted and eight officer drill pay billets; there are an additional nine enlisted and three officer associate pay status billets. ("Large" surface divisions have an allowance of 200 enlisted and 10 officer drill pay billets, plus 12 enlisted and four officer associate pay billets.)

According to the book, the surface program has a specific mission: "To provide trained officer and enlisted personnel available for immediate active duty to increase the manning level of afloat units of the active Fleet to full war complement."

Unless you were enlisted for immediate active duty, or are ordered to a recruit training command for accelerated recruit training, you are as-

ON THE WAY—Books are issued and classes attended, and the Reservist works towards his first stripe.





SIGNING THE CONTRACT, after tests, makes the recruit a civilian sailor, and a Navy uniform is issued.

signed to a class to prepare you for advancement from SR to SA. And so you begin the first phase or cycle of your training at the Naval Reserve Training Center.

When you report for drill, your unit's plan of the day will read something like this:

1915—Officers' meeting.

1925—Set the quarterdeck watch and all messenger watches.

1930—Muster for all hands.

1950—Period ALFA: Leadership discussion.

2000—Eight o'clock reports.

2030—Break in classes.

2035—Commence period BRAVO.

2125—Break in classes.

2130—Commence period CHARLIE.

2220—Classes secure; MAA makes security inspection.

2225—Quarters for all hands.

2230—Secure from drill. Officers' meeting.

Rating group supervisors remain for check-out with Training Officer.

THE SR TO SA curriculum provides you with a basic knowledge of the Navy. You learn the Navy's mission, its organization, its customs and traditions. You are taught the parts of a ship. Somewhere along the way you spend 14 days on active duty for training at a recruit training command. After six months as a recruit, you may be examined and advanced to SA. (SRs who successfully complete accelerated recruit training may be advanced upon completion of that training without regard to length of service.)

Once you've added the stripe of an SA, you begin the second cycle of your training. Having had a general introduction to Navy life, you are now ready for more technical subjects. You learn knot-tying, damage control, ABC warfare techniques, and so on. During this period, you take part in ACDUTRA afloat. After six months in pay grade E-2, you may be examined and advanced to SN.

If you make the grade, you then begin rate training which will prepare you for petty officer status. By this time, you have some idea as to where you want to go, and you become a striker. Surface divisions are authorized to train 27 ratings: BM, QM, SM, RD, SO, TM, GM, MT, FT, MN, ET, RM, YN, PN, SK, DK, PC, MM, EN, MR, BT, BR, EM, IC, SF, DC and HM. Not all ratings are trained by each division, however.

Normally, you must spend about 15 months as an SN before you are eligible and qualify for advancement to PO3. However, those who have

AT DRILLS, Reservists receive general training, attend demonstrations until qualified to be strikers.

TRAINING DEVICES at Reserve Centers ready the civilian sailor for his part in ACDUTRA afloat.

completed accelerated Class "A" school training may become petty officers after nine months of service in pay grade E-3.

After you've sewn on your crow, you're pretty much on your own. Progress up the advancement ladder is determined largely by self-study programs, augmented by on-the-job training—at the training center, on ACDUTRA, or on full-time duty.

If you've shown strong leadership qualities—and have the desire and ability to teach—you may be sent to an instructors' training school. Before long, you find yourself listed in the lesson plan as an instructor or alternate instructor. In fewer months than you'd suppose, you've come full circle—from bewildered recruit to confident, and competent, instructor.

The setting differs from town to town, city to city. Sometimes the action takes place in a sleek, new Naval Reserve Training Center located in a park-like suburban area, sometimes in an aged but well-kept building on a long-established naval base.

These training centers are staffed by full-time active duty personnel who serve in training and administrative capacities. Many are members of the Regular Navy, some are Reservists on active duty in the TAR (Training and Administration, Naval Reserve) program.

The support personnel are responsible for most of the paperwork involved in the operation of the centers. They also see to it that the units served are supplied with everything from paper clips and training aids to uniform issues.

Some stationkeepers serve as instructors, teaching classes on drill nights in such subjects as first aid and sound-powered phones, or conducting review sessions for Reservists up for advancement.

Not all training is carried out in center classrooms. Reservists get practical training in the machine shop, radio shack, welding shop, and so on—depending on the facilities and mission of the center.

And, of course, centers are not limited to training surface divisions. Units of other Naval Reserve programs also drill at the centers. And administrative support must be provided units which spend most of their time drilling in Selected Reserve ships or submarines.

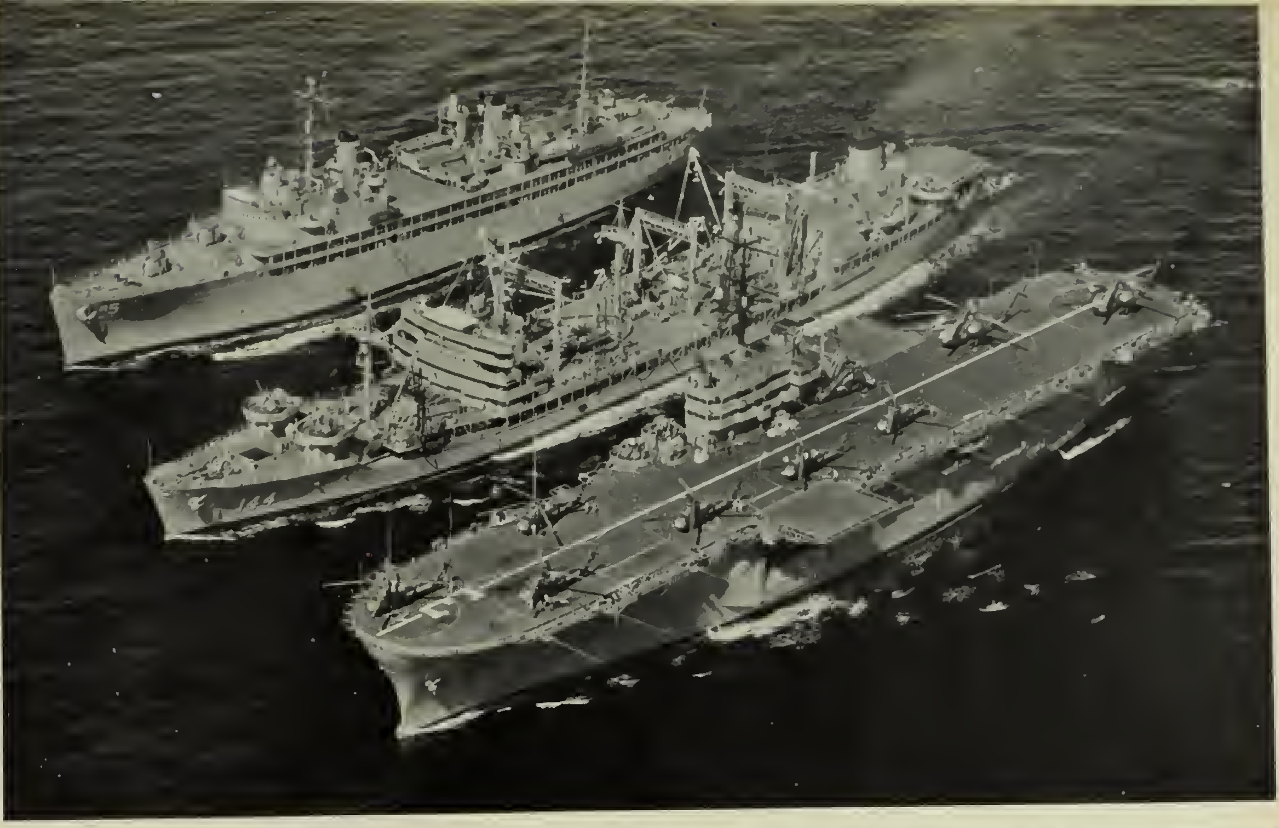
There are more than 300 Naval Reserve or Naval and Marine Corps Reserve training centers located in various parts of the country. There are also more than a dozen Naval Reserve training facilities. Add to these, nearly 140 Naval Reserve electronics facilities, almost a score of naval air stations or Naval Air Reserve Training Units (NARTUs), and you have a pretty fair picture of the widespread training facilities of the Naval Reserve program. And these figures, of course, do not include the many activities which are primarily Regular Navy establishments but which take part in the training of Reservists.

All of them add up to a ready Naval Reserve.

° ° °

Most of the photographs illustrating this article show Surface Division 5-40(M), NR&MCRTC, Washington, D.C., Navy Yard Annex, in action. The civilian-sailor is Joseph Drago, BM3, USNR. Drago, selected as "Sailor of the Year" by his unit, is rounding out his first hitch—serving on active and inactive duty. He plans to ship over and continue his Navy career.

NOW HEAR THIS—Reserve officers and chiefs are briefed by unit's XO.



Whirlybird Nest

The amphibious assault ship uss *Okinawa* (LPH 3) is part of the vertical envelopment team of Amphibious Force Atlantic. The versatile new ship is shown here during an extensive training cruise in the Atlantic earlier this year.

During the cruise *Okinawa* performed various exercises with a number of ships in the Atlantic Fleet to sharpen the seamanship and amphibious techniques of officers and enlisted men of her crew. Leathernecks and whirlybirds of Marine Air Squadrons 262 and 461 were also on deck for amphibious assaults.

The LPH, commissioned this spring, has an over-all length of 592 feet and a beam of 84 feet, enabling her to transport about 2000 troops and 24 large amphibious transport helicopters.

Clockwise from top: (1) uss *Okinawa* and uss *Vulcan* (AR 5) replenish at sea from uss *Mississinewa* (AO 144). (2) Fire drill is held on flight deck. (3) Bug-eyed HR2S's unload jeeps. (4) Marines board choppers for vertical assault. (5) Training in underway refueling is held with the destroyer uss *Biddle* (DDG 5).

LETTERS TO THE EDITOR

Polaris Missile Schools

Sir: Is training at a *Polaris* Missile School available to men in TM, AT, GMT and MN ratings?

We would like to know the locations of the schools on both coasts and the length of the courses, the requirements for the program and the availability of both sea and shore billets. — All hands at USNS AUW Shop, Navy 138, FPO New York, N. Y.

● *Generally, all* Polaris *school quotas are granted on an annual basis to the Chief of Naval Personnel (Pers-B2121) who keeps program requirements filled by drafts upon EPDO. Right now the needs of this accelerated program are so great that quotas can be filled only by personnel who will stay in the program, and not by those who may have only a casual interest.*

Courses at Polaris *weapon system schools vary in length from five to 39 weeks for enlisted personnel and all training is conducted at U. S. Naval Guided Missiles School, Dam Neck, Va.*

To be eligible:

All trainees must have at least 36 months of obligated service upon completion of training, or at least 30 months if career designated personnel.

ET, FT, MT, TM and IC trainees must have completed Class "A" school.

Personnel applying for training must have a clear record for at least one year prior to commencement of training and be recommended by CO.

Application for training should be made on a NavPers 1339 directly to cognizant EPDO.

All rates other than those mentioned above must convert their ratings upon completion of training in accordance with standard procedure for rate conversion in critical areas.

Navymen in rates mentioned in your letter except those rated as Mineman are eligible for Polaris *missile training provided they meet the above requirements.*

Men in the MN rate may only enter by a rate conversion process, preferably to MT. GMT would not be eligible for SSBN duty but could find billets at either a shore support activity or submarine tender. At present, EPDO takes each candidate for Polaris *training separately, fitting him in as requirements come up. Waivers on Class "A" cutting scores are not granted. Aviation (Group IX) rates are treated exactly like their surface counterparts.*

Since about 60 per cent of Polaris *billets are submarine duty, an alternate route for any prospective trainee into the program is basic sub school.*—Ed.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D.C.

No RD Billets on Subs

Sir: Browsing through a back issue of All Hands (January 1962), I noticed that volunteers are needed to fill an ever-growing number of billets on board submarines. You listed a number of ratings needed most, but my rating, RD, was not among them. Isn't it possible for me to be assigned to submarine duty? I'd very much like to be a submariner—so much, in fact, I'd extend or ship over, if necessary. — W.W.T., RDSN, usn.

● *Sorry. Radarmen are no longer ordered to submarine training, since most radar picket submarines have been decommissioned or converted to perform some other function.*

The All Hands *item to which you refer indicated that only men in certain rates are urgently needed for sub duty, if they can qualify. (These are: MM1,2,3; ETC,1,2; MTC,1,2,3,SN; TMC,1,2,3,SN; QM1,2,3,SN; YN1,2,3; SK1,2; CS1,2,3; SD1,2,3,TN,TA. Additionally, there is a current need for men in other rates for which there are billets in submarines. These are: FTC,1,2,3,SN; SO1,2,3,SN; RM1,2,3, SN; ETR3,SN; ETN3,SN.)*

As the RD submarine billets are eliminated, many of the men who filled them are applying for change of rating in connection with the Polaris *missile advanced training programs. Some now serve in surface ships, others at shore stations. None is likely to return to submarine duty as a radarman.*

However, since RD is a critical rating, applications for conversion are approved only if the rating to which conversion is desired is just as critical, or more critical, than RD. — Ed.

Administrative Advancement?

Sir: I took both the February 1961 and February 1962 CPO examinations; I passed both times but was not advanced because of insufficient billets in my rating.

I will soon be transferred to the Fleet Reserve and would like to request an administrative advancement, if that is possible, before I retire.

Will you refer me to the current instructions on the subject? — H. P. J., SK1, usn.

• *We hope you haven't budgeted your retirement check with a chief's pay in mind because administrative advancements went out with the Korean conflict.*

The only way a man can retire as a chief petty officer is to pass the examination and be appointed before transfer to the Fleet Reserve.—Ed.

More On Early DDs

Sir: As an addendum to your destroyer issue of September, you may be interested in some information on two rather important classes omitted from "The History of the Greyhound," pages 8 and 9. These will have been especially missed by those of us who served in DDs in Queenstown and Brest in 1917-18, and by some people like Vice Admiral Reggie Kauffman, a real destroyerman a decade or so before World War I.

First there were the coal-burning flivvers—uss *Lamson* (TBD 18) was one —a class of five ships just before the oil-burning flivvers commencing with *Terry* (TBD 25) and including my old ship *Monaghan* (TBD 32). I think the *Terry* and *Beale* class were generally considered the same—750-ton oil burners.

But old destroyermen will particularly miss the "Thousand Tonners." Beautiful *Wadsworth* (DD 60) and *Wainwright* (DD 62) were in this class, which followed the oil-burning flivvers (*Jenkins, Monaghan,* etc.). *Shaw* (DD 68) also was a thousand tonner—had patent anchors with a new British bow after being cut in two by *Aquitania*, I believe.

Gwin (DD 71) and on up for several hundred numbers were all called "flush deckers" by the older generation. The younger men called them "four pipers," I suppose to distinguish them from the *Farraguts* and later vintage that came out when we finally started building DDs again in the '30s.

Pre-WW I "torpedo boat men" were plenty rugged—and those manning the coal-burning DDs were said to be "men of iron."

Just when the Navy commenced designating destroyers as DDs I don't know. But, following torpedo boats (TB classes), commencing with *Lamson* (TBD 18), I think, the boats were designated all like this—USS *Monaghan* (TBD 32), *i.e.,* "Torpedo Boat *Destroyer* 32." Hence destroyer, hence DD.

Hope the foregoing is of interest.—Admiral J. L. Holloway, Jr., USN (Ret.)

● *Of high interest, Admiral. In the September* ALL HANDS *we tried to cover the major developments in destroyer growth over the years. Long-time Navymen like you who served in the old DDs, TBs, TBDs, or what-have-you, certainly know them best and can fill us in on variations we missed.*

And the Naval History Division of the Office of CNO sifted through their old destroyer-type listings and came up with some information that pretty well substantiates what you've told us.

Cushing, *Torpedo Boat Number 1, through* Wilkes, *Torpedo Boat Number 35, were authorized by Congress between 1887 and 1898 for construction as torpedo boats, and were, indeed, called torpedo boats.*

The construction of the first torpedo boat destroyers was authorized on 4 May 1898. There were 16 in all—one of them Bainbridge, *officially designated in the authorization act as Torpedo Boat Destroyer Number 1.*

Navy listings carried the name "torpedo boat destroyer" until publication of the Ship's Data Book of 1911, which used the term "destroyer." However, in 1917 and 1918, new construction authorizations referred to the same ships as both torpedo boat destroyers and plain destroyers. Thereafter, "destroyer" was used in new construction.

It wasn't until 17 Jul 1920 that a classification symbol was added to the hull number assigned to all ships on the Navy list. DD was assigned to all ships that had been built as torpedo boat destroyers, or destroyers, under the various shipbuilding programs.

The symbols TB and TBD were used more or less unofficially as a matter of convenience. They never were used as part of the hull classification of a ship (such as Cushing, *TB 1 or* Bainbridge, *TBD 1).*

Even before the official hull classification of 1920 was adopted, the term "destroyer" was widely used for reference to the torpedo boat destroyers, and torpedo boats.—ED.

Augusta *Homeward-Bound Pennant*

SIR: We noted with much interest your article entitled "Homeward-Bound Pennant" (August 1962 "How Did It Start").

Now serving as executive officer and assistant electronics officer of a communication station, we were dashing young radiomen aboard USS *Augusta* (CA 31) while she was in China and on her return to the states. We seem to remember ships like *Gold Star, Black Hawk, Tutuila, Bulmer, Edsall, Stewart, Asheville, Sacramento* and *Pittsburgh,* that had many years' service on the China Station, any one of which might make "*Augie*" seem like a Johnny-come-lately in that golden era when the American man-of-war was king of the Orient.

We are both proud possessors of strips of the longest homeward-bound pennant of which you've heard. To keep the record on course, we were several years too late for the hog bladder bit and had to be satisfied with three aerographer's balloons to keep our tail on high when we departed Manila, with Sid Zeramby and his boys playing "California, Here We Come."

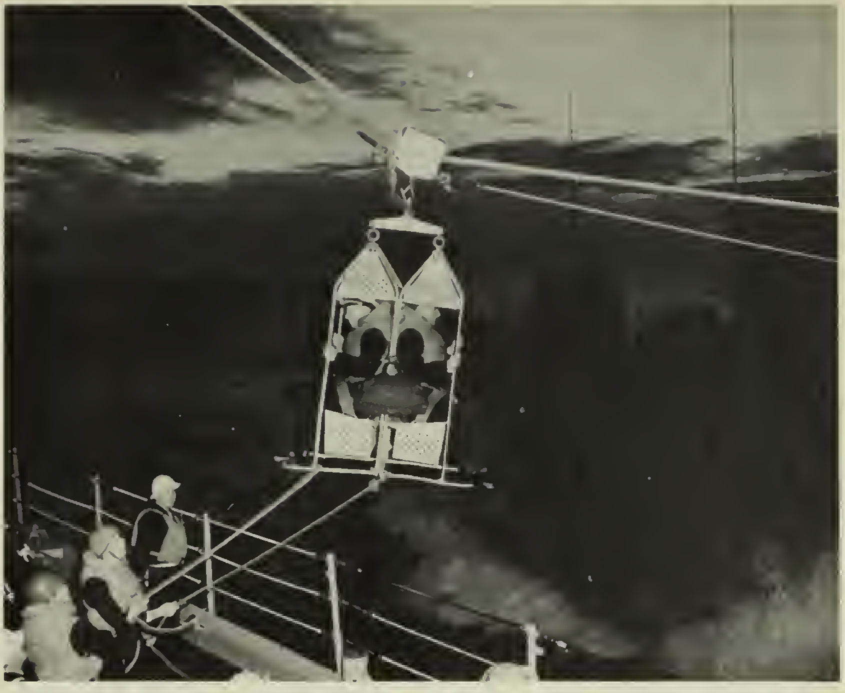
As a matter of interest, the pennant carried away at the hoist shortly after getting underway, delaying our departure from Manila about two hours while boats were lowered to retrieve the pennant. Sid and his boys got pretty tired from playing the same chorus over and over while the *Augusta* lay dead in the water.

The pennant's colors ran together from the dunking, because the silk was anything but fast-dyed. When we streamed the pennant for entering Long Beach, it was hard to tell where the stars left off and the red and white started.

We are serving together again for the first time since returning to the U. S., and in discussing the homeward trip, fell to wondering if there are many more chunks of the "*Augie*" pennant still in the footlockers of active duty men. Could you enlighten us?—William A. Evans, LCDR, USN, and Opie H. Bittle, CWO-2, USN.

● *Maybe some of our saltier readers can provide more information on the pre-war China Station ships and how long they served.*

Of course, we have no idea how many Augusta *sailors of that period are still on active duty, but your letter will probably start some tall sea stories a-flowing from both active and retired Navymen around the world.*—ED.



GOING OVER—Deck hands man the lines during early morning highline transfer of personnel from USS *Boston* (CAG 1) to USS *Adams* (DDG 2).

WET BACKS — Men are transferred to safety from flooded compartments during damage control exercise at Fleet Training Center, San Diego.

More on Pittsburgh

Sir: In your June 1962 number of ALL HANDS, I read in the "Letters to the Editor" section an inquiry about an LST named *Pittsburgh*.

I am a member of the Pittsburgh Naval Security Group and am now working for a corporation which built LSTs during the war. I checked with the editor of the company publication and we came up with the following information:

LST 750 was built by the corporation for which I am now working. A war bond drive was held to underwrite its cost and the vessel was referred to locally as "Allegheny County's Own." This was not, however, an official name.

LST 750 was sunk off Negros, in the Philippines, late in 1944. Another bond drive was held to underwrite the cost of building a new LST to avenge the sinking of *750*.

The new ship was *LST 1059*. She was taken to the Sixth Street wharf in Pittsburgh for public inspection in May 1945. – Thomas P. Lachowicz, CT2.

• *Thank you for the information. The records which we had readily available, showed* LST 750 *was completed in 1944. Although you did not mention that it was on public display, since it was underwritten by war bond sales in and around Pittsburgh, we think it likely that it might have been shown at the Sixth Street wharf in 1944.*

The other possibility is that our first correspondent was confused concerning the date on which he saw the LST.

Regardless, it seems apparent that either 750 *or* 1059 *was the "LST called Pittsburgh."* – Ed.

Sound Off, Seabees

The Bureau of Yards and Docks is trying to locate and identify Seabee units and Seabee veterans' organizations which stage annual reunions and other activities.

Presidents or corresponding secretaries of these organizations are requested to send their names and addresses to: Bureau of Yards and Docks, Code 21.3, Navy Department, Washington 25, D.C.

Pioneer Oil Burners

Sir: In the article "Pioneers of the Fleet" (June 1962), the statement was made that "in 1912 the U. S. Navy's first two oil-burning capital ships, USS *Nevada* (BB 36) and *Oklahoma* (BB 37) were laid down. They were commissioned in 1916."

For many a year now I have been telling anyone who would listen that my father, the late Alfred L. Gibson, Chief Electrician, USN, was in the crew that put the Navy's first oil-burning battleship in commission—USS *North Dakota* (BB 29) which I believe was commissioned in 1912.

If I am not mistaken, *North Dakota* had oil-burning equipment which was auxiliary to her coal-burning setup.

Coming into Hampton Roads with the Fleet, shortly after she was commissioned, she shifted from her coal to her oil, and the oil caught on fire.

For years our family had a bunch of old snapshots (now lost) showing great clouds of black oil smoke pouring out of her stacks. My father got a citation for staying at his post and keeping blowers going, which drove the flames up the stacks.

Have I been incorrect in claiming that *North Dakota* was the Navy's first oil-burning BB? Perhaps your writer meant that *Nevada* and *Oklahoma* were the first BBs to use oil exclusively. – Edmund A. Gibson, Navy Training Publications Center, U. S. Naval Station, Washington 25, D. C.

• *You might be called on a technicality. Actually the commissioning of* USS Delaware *(BB 28) took place a few days before that of* North Dakota *(BB 29).*

Delaware *was commissioned on 4 Apr 1910 while* North Dakota *wasn't commissioned until 11 April.*

Delaware *and* North Dakota *carried 2668 and 2676 tons of coal respectively. This served as primary fuel. In addition, they each carried 380 tons of oil as auxiliary fuel.*

Nevada *(BB 36) and* Oklahoma *(BB 37) were the first battleships to carry oil as their primary fuel.*—Ed.

OTHER ADVANCING POs stand by as CO of USS *Edmonds* (DE 406) presents CPO's hat to Cornelius Wall, EM1, USN.

Goldie Makes Mock of Record

SIR: Regarding your "Longest Continuous Deployment" in the August ALL HANDS, I was a crew member of USS *Gold Star* during 1935, '36 and '37. As such, I challenge *Mockingbird's* claim.

If my memory serves me correctly, "Goldie Maru" was deployed from 3 Nov 1924 until 23 Feb 1946—more than 21 years. If so, *Mockingbird* (MSCO 27) will have to sit in one of the last rows. — C.C.J., CWO, USN.

- USS Gold Star *(AG 12) was indeed deployed from 3 Nov 1924 until 23 Feb 1946. She was on Pacific duty and did not return to the United States during that period.*

Until Pearl Harbor day, she was station flagship for the military governor of Guam and was the island's main supply link with the world.

From Guam, she carried, among other cargoes, copra, Guam's main export item. Occasionally the wives and children of servicemen stationed at Guam sailed on board Goldie Maru *as passengers on "health cruises" to Yokohama, Shanghai and other cargo stops in the Far East.*

Her crewmen were proud of the old "Hog Islander" to the point of wearing a little gold star attached to their ear lobes.

The governor of Guam highly disapproved of this practice and attempted to stop it but some men removed the gold star, as ordered, then replaced it with a tattoo.

Goldie Maru *was en route to the Philippines when the Japanese attacked Pearl Harbor and her cliff-hanging journey was the subject of a story by Captain Joseph Lademan which appeared in the March 1950 number of* ALL HANDS *Magazine.* — ED.

Steam Powered Subs?

SIR: Recently I read a book in which the author stated that, during World War I, large submarines were built which were driven by steam while on the surface.

I found no further mention of this class of boat in the book and I have been unable to find any evidence to support the statement.

Can you recommend a publication which will verify the existence of these submarines or can you provide any information concerning them? — C.C.B., MMCA, USN.

- *We rounded up some old-timers in the submarine service and culled the records of others in addition to searching the library for a mention of a World War I steam driven submarine.*

We were not notably successful. However, for the record, here is what we found:

The first Nautilus *(SS 168) had a boiler that provided steam for "hotel services" while surfaced. This is, of course, a far cry from steam propulsion.*

Holland's first submarine, Plunger, *was intended to be steam-driven while on the surface but this submarine was never accepted by the Navy.*

All United States nuclear submarines are now powered both on and below the surface by water cooled reactors (steam producing). Thus, so far as we could ascertain, USS Nautilus *(SSN 571) was the first submarine in the United States Navy which could be said to be steam-driven.* — ED.

NOSE UP HIGH — Navy's most powerful submarine hunter, the P3V-1 Orion, gets performance-proving evaluation at Patuxent River, Md.

Waves and Nurses

SIR: We have been discussing your article on Waves in the July issue of ALL HANDS.

You stated that there were approximately 700 Wave officers on active duty in the Navy today.

We have noticed many women officers serving in billets in naval hospitals and we think they are Waves. If this is so, there must be a lot more than 700 Wave officers on active duty. Your figure must be incorrect. — P. C. K., SOG2, USN.

- *Most women officers you are likely to see in Navy hospital billets are Navy nurses. They are members of the Navy Nurse Corps, which was established in 1908.*

The Waves, as the July article pointed out, were established as an organization in 1942. The name, Waves, also as the article pointed out, stands for Women Accepted for Volunteer Emergency Service. Waves, both officer and enlisted, serve principally in such areas as line and supply.

Although there are both Navy Nurse and Wave officers, the Navy nurses are members of the Navy Nurse Corps. — ED.

Training for Storekeepers

SIR: In recent years U.S. Navy Supply Department organizational functions have switched more and more to mechanized, or business machine, control. It figures that this trend will continue, and expand, in the future. I feel that storekeepers should start receiving some training in this direction, lest the storekeeper rating become obsolete.

I am an SK1 with 10 years' service. Is there any way I can switch to the machine accounting rating—or possibly into the new data systems technician (DS) rating recently established? Failing this, is there any way I can receive schooling in the business machine/computer field without a change of rating? —R.C., SK1, USN.

- *Machine accountants receive their training through in-service training. No schooling is presently available in the machine accounting field for SKs. As for the data systems technician rating, SK is not one of the source ratings for this rating. BuPers Notice 1440 of 19 Mar 1962 contains complete information on this subject.*

May we add that you appear to be becoming unduly haunted by the specter of machines taking over the functions of people. Machines will, no doubt, become increasingly important—but good Navymen have always been, and will continue to be, even more so. So far as the Navy is concerned, there will be plenty of need for the services of trained, top-flight storekeepers in the foreseeable future.—ED.

BACK FROM CUBA — USS *Hunley* (AS 31) has returned to Newport News, Va., for final adjustments following her six-week shakedown cruise.

KD Units Get Around

SIR: In the July 1962 ALL HANDS, KD Unit 25 claimed a "record of sorts" by serving on board 35 different ships in a three-year period. I agree that KD 25 really gets around, but I'm not so sure she established a record. A KD Unit (# 28) with which I served from October 1947 to February 1952 served on board 40 different ships in less than three years (January 1948 to October 1950) as follows:

USS *Moale* (DD 693), *Henderson* (DD 785), *DeHaven* (DD 727), *Duncan* (DDR 874), *Isbell* (DD 869), *Fechteler* (DD 870), *Rupertus* (DD 851), *Brush* (DD 745), *Myles C. Fox* (DDR 829), *Huntington* (DD 781), *Collett* (DD 730), *Benner* (DDR 807), *Wood* (DD 715), *Berry* (DDK 858), *McAffery* (DDK 860), *Swenson* (DD 729), *Thomason* (DD 760), *Baussell* (DD 845), *Lofberg* (DD 759), *Hamner* (DD 718), *Wiltsie* (DD 716), *Carpenter* (DD 825), *Rogers* (DDR 876), *Perkins* (DDR 887), *Philip* (DDE 498), *St. Paul* (CA 73), *Rochester* (CA 124), *Astoria* (CL 90), *Pasadena* (CL 65), *Manchester* (CL 83), *Oakland* (CLAA 95), *Valley Forge* (CV 45), *Curtiss* (AV 4), *Carmick* (DMS 33), *Caliente* (AO 27), *Guadalupe* (AO 57), *Mispillion* (AO 105), *Navasota* (AO 106), *Cacapon* (AO 26), *Passumpsic* (AO 107).

This may not be a record for all Navy units (frogmen, amphibians, Seabees and other airdale units), but I think it will stand up for all KD units. — G.K.G., ADJC, USN.

• *You either have an amazing memory or keep mighty good records. In either case, you've confirmed the mobility of KD units (which maintain the drone aircraft ships fire at for gunnery practice). It would be interesting to hear from the frogmen, Seabees, amphibians, etc., who keep track of duty stations for "the most" records.* — ED.

No Short Tour Before RID

SIR: Last January I reported aboard ship after a tour at Great Lakes, Ill., as a recruit instructor. When I received my sea duty orders I was told by a YN at Great Lakes to apply for recruit instructor duty upon completion of 12 months at sea, if I wished, and rest assured I would get it.

Now, the yeoman on board my ship says there is nothing in pertinent directives that permits me to apply for RID after 12 months at sea. Where do I stand? — B.A.M., SF1, USN.

• *Right where you are—for perhaps another four years. If you wish to go back to instructor duty, you must qualify under the standard Seavey procedure for your rating, as outlined in the "Enlisted Transfer Manual," Chapters 3 and 5.*

We can speculate on the length of your sea tour—based on current sea tour commencement date cutoffs for SF1s. At present, SF1s are serving at sea approximately five years before becoming eligible for Seavey transfer ashore. If manpower requirements remain pretty much the same in years to come, you'll have another four years at sea.

The school assignment section in this Bureau has received many queries similar to yours. The answer is always the same: Qualify under the Seavey in the normal manner for your rating. — ED.

September Errors?

SIR: I have just finished reading the September 1962 issue of ALL HANDS While the issue, as a whole, is very good and informative, I feel compelled to call your attention to several items.

In the article "Guided Missile Destroyer," reference is made to "electronic technicians, fire controlmen, missile technicians and gunner's mates."

I realize that among Navymen it is common practice to refer to a man in the FT rating as a fire controlman. However, there has not been a fire controlman in the Navy for several years.

The old fire controlman, of necessity, became a fire control technician with the advent of radar electronics. This made the requirements of the FT rating in the electronics field second to none.

Getting that off my chest was the main purpose in writing this letter but I would like to call your attention to several other things.

I realize your writers can't be experts in all matters concerning the Navy but I feel these items need some comment. Here they are:

1. On page nine, USS *Young* (DD 580) is listed as having six 5-inch/38-caliber guns. Actually, she has only five.

2. On page 33, you state *Forrest Sherman* class DDs were the first United States warships to have more firepower aft than forward. This is incorrect.

3. On page 16, the middle, left photo is captioned: "Chief Champion inspects ship's fire control radar." The chief is checking a Mark 1A computer.

4. On page 35, the middle right photo is captioned: "Missilemen check *Tartar* system." It should read "Missile Technicians check out *Tartar* missile." There is a whole lot more to the *Tartar* system than the missile. — Henry A. Wristen, FTCS, USN.

• *Thanks for your fine letter, chief. We don't like to make mistakes, but when we do (gulp) we want to correct them.*

As you say, the rating of fire controlman went by the board some time ago. However, as you know, ALL HANDS *Magazine endeavors to speak the same language the Navy speaks.*

When we have a choice between a technically correct term and one that is as universally used as fire controlman, we frequently cast our lot with common usage.

Using the value of hindsight, however, we concluded that, since the article was in a rather technical vein, we should have used the technical term—therefore deserve your correction.

Now to reply to your other comments. Our replies are numbered to correspond with the remarks in your letter.

1. "Jane's Fighting Ships" lists destroyers in the Fletcher *class, to which*

Young *(DD 580) belongs, as being armed* (when new) *with five 5-inch/38-caliber guns—not six. We gave the right number on page 19, but we slipped up on page nine.*

We understand there has been a modification in Young's *armament which "Jane's" does not list.*

2. Your letter is the first to call our attention to this boo boo. As we just said, the Fletchers, *which preceded* Forrest Sherman *class DDs, have five guns—two forward, three aft.*

3. It is indeed a Mark 1A computer that Chief Champion checks.

4. The people who sent us the picture say the men were really checking out the Tartar *system. They just happened to be checking the missile when the picture was snapped.* — Ed.

Army, Navy, Paratroop Insignia

Sir: A picture of an SM2 who wears an Army paratroop insignia on his Navy uniform appears on page 26 of the April 1962 All Hands. It's my understanding that wearing insignia of another service is not correct.

For example, I was awarded gunners wings after being graduated from the U. S. Army Air Force Aerial Gunnery School in Panama City, Fla. I served as tail gunner on a B-24 heavy bomber over Italy in World War II.

After seeing the picture of the Navyman with Army paratroop insignia, I'm confused. If he is authorized to wear that, why can't I wear my gunners wings? I have been informed by some that it would be against regulations. Others have told me I must apply for a letter of authorization which will be kept in my service record. If so, to whom do I write?—W. H. K., DMCA.

- *The paratroop and Navy parachutist insignia are identical. The SM2 to whom you refer is a Navy parachutist.*

As for your gunners wings—sorry, you are not authorized to wear them on your uniform. Qualification insignia of other services are not worn on the Navy uniform (Uniform Regs, *articles 0768 and 0656.1A).* — Ed.

[Note to purists: Although Webster's *still lists "insigne" as the singular form, the Permanent Naval Uniform Board says armed forces experts on the subject no longer use the word. In fact (the recorder of the Uniform Board informs us) as far back as 1944, Arthur E. DuBois, Chief of the Heraldic Section, Office of the Quartermaster General, War Department, wrote:*

"Within the services custom has abolished the singular 'insigne.' 'Insignia,' plural, does for both."

Henceforth, All Hands *will go along with that custom.* — Ed.*]*

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

- USS *Arizona* (BB 39)—A reunion for those who served on board from date of commissioning to 7 Dec 1941 is scheduled for 20 April 1963, at the Lafayette Hotel, Long Beach, Calif. For details, write to Joe Keehen, 811 Locust Ave., Long Beach 13, Calif.
- USS *Elmore* (APA 42)—A reunion is scheduled for 19-21 Jul 1963, in Wilmington, Del. For more information, write to Harvey P. Parry, Jr., 1431 Wedgewood Rd., Oak Hill, Wilmington 5, Del.

Who's Shippingest?

Sir: At the Receiving Station, Treasure Island, Calif., we've been following with interest the "best" reenlistment rate percentages claimed by the Naval Air Facility, Monterey, Calif., and the Naval Air Auxiliary Station, Fallon, Nev. The RecSta at T.I. has them both beat. Our reenlistment percentage was 94.4 of those eligible to ship over during the 10-month period from August 1961 through May 1962. Of 36 men and women eligible to reenlist, 34 did so. Our average on-board count is 240 enlisted personnel. — J.N.U., PN1, USN.

- *Let's see now. In the December 1961* All Hands, *NAF Monterey challenged all commands with an average on-board count of 500 enlisted personnel to a duel with reenlistment percentages recorded over a 10-month period. The one with the highest percentage would be honored as the shippingest. Over a 10-month period, Monterey had 83.5 per cent reenlistments among those eligible.*

In the August 1962 All Hands, *NAAS Fallon took up the challenge with an 85.2 per cent ship-over rate recorded over a nine-month period, one month short of the period laid down in the ground rules by Monterey, but close enough to be considered by our self-styled Editor in Charge of Reenlistment Statistics. Fallon's average on-board count of 585 enlisted personnel was also close enough to the 500 stipulated by Monterey.*

Your 94.4 per cent reenlistment at T.I. is mighty impressive, but, says E-in-C of RS, in all fairness to Monterey and Fallon, which have larger turnovers of enlisted personnel, your statistics would probably be best challenged by commands with on-board counts in the 200 range. Any takers? — Ed.

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LANDING CRAFT head for Normandy as *USS Augusta* stands by. *Rt:* LSMR fires on Japanese-held Okinawa.

Spotlight on the Navy in

FROM THE BEGINNING of our existence as an independent nation composed of 13 sparsely populated, loosely connected states in the 18th century, to the world power the United States is today, the Navy has been a vital and often decisive factor in whatever military operations we have undertaken.

The history of the Navy since our country gained its independence has been so entwined with our national history that it is known to almost every schoolboy.

For many Navymen, however, history left off and current events began about the end of the first World War. For others, the events of World War II are shadowy memories; almost everyone has some memories of the Korean conflict.

Since the Navy's role in each of these conflicts has been one which affected the life of every American, ALL HANDS has selected the following naval actions of the 20th century as examples of the way the Navy has helped to shape the course of history. Significant naval actions of the 18th and 19th centuries were covered in the June 1962 issue of ALL HANDS.

WW I—The North Sea Mine Barrage

The German policy of unrestricted submarine warfare during World War I had succeeded in placing England in a dangerous situation by cutting off almost all food and war supplies.

The entry of the United States into the war did not immediately alter the situation, although the use of destroyers to escort convoys across the Atlantic did enable ships to reach safety in increasing numbers.

The British had tried to bottle the German submarine fleet in its North Sea ports by laying a mine barrage across the entrance of the North Sea, but their efforts were nullified by German countermeasures.

When the United States entered the war, the only mine in the American arsenal required direct contact to produce detonation. To use such a weapon effectively would have meant hanging a curtain of mines in water which varied in depth from 400 to 900 feet, in order to prevent submarines from passing either over or under them.

After considerable experimentation, the United States produced a mine which had a long "antenna" made of thin copper cable which reached within a few feet of the surface and was supported by a small metal buoy.

Any metal surface which touched the antenna at any point produced an electric current which detonated the mine. This meant the number of mines needed to close the entrance to the North Sea would be reduced by one fourth with a proportionate decrease in the number of minelaying ships, crews, officers, bases and supplies that would be needed.

In November 1917, the British and United States Governments agreed to lay a barrage from Scotland to Norway, a distance roughly equivalent to that from

AA GUNS blast away during action in Philippine Sea.

BIG GUNS blast the enemy shores. *Rt:* Navy gunners explode Japanese suicide plane short of its mark.

the Twentieth Century

the city of Washington, D. C., to New York.

To do the job Captain Reginald R. Belknap, USN, was selected to supervise the conversion of coastal merchant vessels to minelayers, train crews and tie together the problems of bases and supplies.

Actual minelaying began in June 1918 with a squadron capable of planting 5500 mines in four hours.

While the work was in progress, the minelayers were escorted by destroyers and protected from the German Fleet at Kiel by battleships.

When the undertaking came to an end in October 1918, a total of 70,263 mines, supplied by the United States, had been planted in an area of 550 square miles. As many as eight submarines were known to have been destroyed by the barrage and possibly more were damaged.

But it was the strain upon German submariners during the hours required to pick a path through the barrage which had the most telling effect. German morale was delivered a terrible blow, and the mine barrage contributed toward speeding up the collapse of the German war effort.

LOOKING UP — All eyes are skyward during air attack.

Comeback after Pearl Harbor

Accounts of the attack on Pearl Harbor are replete with contrasts which include telltale signs of the approach of war, posed side by side with pleasant breakfasts in pre-Christmas Honolulu which were interrupted when the first bombs fell on the morning of 7 Dec 1941.

The Japanese planes swept over Pearl Harbor almost completely unopposed. In a matter of minutes, they had sunk or disabled eight battleships and most of the other ships which were peacefully at anchor that morning.

Not only did the toll include a large portion of the nation's seapower but nearly half of the Navy's best aircraft were either destroyed or badly damaged.

What bombs and torpedoes didn't accomplish, the strafing Japanese planes did. Before the sun had set, over 2000 Navymen had died, were missing or were to die of wounds received that day.

Much has been written about what the Japanese did that day. Less has been said about what they failed to do.

The Japanese planes concentrated on the mobile power of the Fleet and almost completely ignored the permanent repair facilities of Pearl Harbor. Those facilities, in the hands of workmen—civilian and military—raised, repaired and patched up all but two of the sunk or damaged combatant ships. The ships that were patched at Pearl were sufficiently seaworthy to cross to the mainland for further work in West Coast shipyards.

This accomplishment, which was a tremendous testimonial to the Navy's regenerative power, was unparalleled in the history of naval salvage and repair.

It did two important things for the United States: It minimized the actual loss of ships and it modernized

(*Continued on page 34*)

SIGNIFICANT NAVAL ACTI

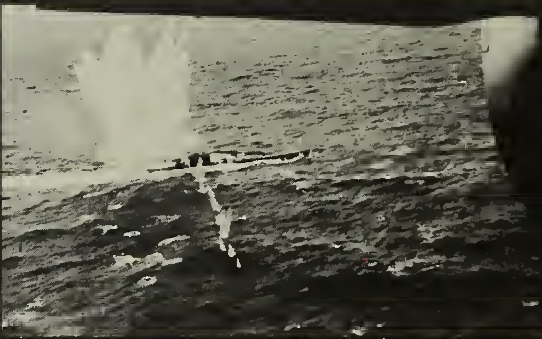
INTRODUCTION — The Navyman of this c
in times of great trial, the courage and sea
a great naval power during America's fir
and the accompanying article give an ac
greatness during our century.   June 1962

WORLD WAR I MINE BARRAGE —Perhaps the most outstanding offensive United States naval action of World War I was the laying of the 240-mile-long mine barrage across the North Sea from Scotland to Norway. This was a joint operation conducted by the United States and British navies to barricade the German submarine fleet. In 6 months a total of 70,263 mines were planted in the 240-mile stretch.

COMEBACK AT PEARL —The Japanese raid on Pearl Harbor almost crippled the U.S. Pacific Fleet, but it left most of Pearl's repair facilities intact. Thus, before the smoke had cleared, the Navy was able to begin its rescue and salvage effort. Of the 15 combatant ships sunk or damaged, all but two lived to fight again. USS Nevada (above) later saw action from Normandy to Japan.

CORAL SEA —Port Moresb
New Guinea, was indispens
1942 the United States Nav
invasion force bent on takin
followed, although the Am
they checked the Japanese
Japanese flattop takes a b

THE SOLOMONS OFFENSIVE —The ultimate objective of the Solomons offensive was the big Japanese base at Rabaul. As in the fight for Guadalcanal, the fighting in the upper Solomons involved a series of surface battles which the U.S. Navy won. In the entire Solomons operation the Japanese lost 50 combat ships and 2935 planes. Above: The objective of the United States Navy, the big Japanese base at Rabaul.



BATTLE FOR THE ATLANTIC —"The only thing that really frightened me during the war was the U-boat peril." So wrote Winston Churchill. In 1942 the German submarines were inflicting severe losses on Allied shipping. The situation reached a critical point before Allied anti-sub forces took the upper hand in 1943. Eventually, they sank over 750 German U-boats, including this one.

NORMANDY LANDINGS —
supported by the American
Early dawn disclosed to a
largest array of ships ever c
warships rendered invalua
bringing their guns to bear
inland. Above: The tide

SUBMARINES vs JAPAN —The Empire of Japan would survive so long as her ships fed her at home and sustained her armies abroad. All over the Pacific our subs had one prime objective, sink Japanese merchant ships. Our submarines accounted for a total of 1113 of them and literally sank the Japanese Empire. Above: On the horizon a Japanese merchant vessel is seen as she goes down in a cloud of smoke.

FIGHTING OFF THE KAMIKAZES —To win the Okinawa campaign the Navy withstood the heaviest punishment in its history, with 36 ships sunk and 369 damaged. Most of these ships were victims of suicide planes, some 1500 of which struck between 6 April and 28 May 1945. In the first large attack alone, Japan used some 400 planes, but even these tactics couldn't stop the United States Navy.

CARRIER STRIKES AGAIN
carrier task force was the
naval power in history. Ca
the way for the invasion of
the source of the kamikaz
stroyed 1223 enemy aircraf
merchant ships in little over

Prepared by ALL HANDS Magazine

NS of the 20th CENTURY

ıry has often been called upon to display,
ıship that helped the United States become
entury and a quarter. This centerspread
nt of some of the Navy's times of trial and
L HANDS covered earlier naval actions.

ocated on the underside of
to the Allies. In May of
oved in to stop a Japanese
at base. In the battle that
ns suffered greater losses,
vance. Pictured above, a
g from our carrier planes.

MIDWAY—Up until the Battle of Midway the Japanese navy had never known defeat. Facing a superior force, the Americans won this decisive battle by sinking all four of the Japanese carriers in the attacking force. From this point on the Imperial Navy turned from the strategic offensive to the defensive. Above: This Japanese carrier, its flight deck riddled with holes, did not escape the attacking force.

THE FIGHT FOR GUADALCANAL—In the struggle for Guadalcanal the U.S. Navy engaged the Japanese in a number of sea battles resulting in heavy losses to both sides. However, the Japanese were so weakened that the initiative passed definitely to us for the rest of the war. Above: Men of a U.S. Navy warship scan the skies just after an encounter with Japanese aircraft at Guadalcanal.

Normandy landings were
tish, and Canadian navies.
shed German sentries the
ıbled up to that time. Our
support to forces on shore,
e enemy as far as ten miles
didn't stop at Normandy.

PHILIPPINE SEA—The invasion of Saipan constituted a most serious threat to the Japanese cause. In mid-June 1944 the Japanese fleet moved to repulse the invasion. In a two-day fight we won so decisively that the Japanese high command thoroughly understood the war was lost. Our subs sank two of the three carriers Japan lost. Above: Retreating Japanese maneuver in a vain attempt to avoid our bombs.

LEYTE GULF—This three-part battle evolved from a desperate Japanese attempt to hold the Philippines. Although weakened by 3 years of war, the Japanese fleet still had substantial gun-power. However, when the smoke had cleared from this battle the Japanese fleet was through as a fighting unit. Above: An American cruiser engages in a gunnery duel during the night action off the coast of Leyte.

APAN—The WW II fast
test concentration of sheer
based aircraft helped pave
awa and later in striking at
their final raids they de-
l sank 23 warships and 48
onth.

INCHON LANDING—With no time for rehearsal and only minimum time for combat loading, Joint Task Force Seven successfully executed this difficult amphibious attack in a harbor famed for abnormal tide conditions. Once ashore, the land forces went on to take Inchon, Kimpo airfield, and Seoul. Thus, the North Korean army's drive into South Korea was smashed. Above: U.S. Navy at Inchon.

COMBAT IN KOREA—During the Korean fighting, which lasted a little over 3 years, the Navy carried out a tough job with traditional skill and efficiency. Besides conducting amphibious, blockade, minesweeping and transport operations, Seventh Fleet ships fired 4 million rounds of ammunition at the enemy and Navy and Marine aircraft flew 276,000 combat sorties. Above: LSMR rockets bombard Hungnam.

DARING DEEDS by submen far from homeport sank many enemy ships spearheading advance in Pacific.

(*Continued from page 31*)

nearly all the damaged vessels so they were more efficient than before. Navymen and shipyard workers started the comeback within hours of the attack.

In less than two weeks after the attack, the battleships *California* (BB 44), *Nevada* (BB 36) and *West Virginia* (BB 48) were at sea. Three light cruisers, *Helena* (CL 50), *Honolulu* (CL 48) and *Raleigh* (CL 7) left Pearl Harbor by the end of January.

Possibly the most important effect of the Japanese attack eventually worked against them. The damage to our battleship strength by carrier aviation led the Navy to place great reliance in aircraft carriers. In a war in which planes often came to be used as the Navy's main weapon the importance of this factor is incalculable.

The Battle of the Coral Sea

The Halsey-Doolittle raid on Tokyo on 18 Apr 1942 had provided even the most victory-happy member of the Japanese high command considerable food for thought and helped cause a reappraisal of Japanese capabilities.

Out of this reappraisal came several objectives on the part of the Japanese which led to the Battle of the Coral Sea in May 1942. These were:

- To take Port Moresby in southern New Guinea to secure the Japanese Empire in the Southeast and provide a springboard for further advances.
- To extend Japanese defenses in the central and northern Pacific by taking Midway and the Aleutians.
- To cut off Australia from the United States by taking New Caledonia, Fiji and Samoa. This would put Australian cities within range of Japanese bombers.

Some serious obstacles stood in the way of Japanese realization of their goals. Their fleet was dispersed because of the United States raids on Ceylon and Tokyo. Moreover, the Americans, who had broken the Japanese code after Pearl Harbor, knew of their plans.

Although pre-knowledge of Japanese intentions was all to the good, the United States had trouble gathering sufficient force to counteract the Japanese plans.

Two carrier task forces were available and RADM J. G. Crace, RN, brought HMAS *Australia* and *Hobart* from down under.

The battle was one in which the Japanese made some incredible blunders. After the battle had ended, the damage to each side was about the same, and each side was to claim victory.

Objectively, the Japanese were defeated. They failed to land at Port Moresby and, never again did Japanese ships penetrate the Louisiades.

Had the Japanese carriers, which were either sunk or disabled in the Coral Sea, been available for use during the Battle of Midway, it is possible that a different ending might have been written to that latter story.

On the propaganda front, while Japan announced a victory in the Coral Sea, Hitler sent a message of congratulations, saying that the United States would hardly dare to engage the Japanese Navy again.

The United States government made no official announcement of the battle's outcome until after the Battle of Midway. However, reports trickled back to the newspapers and gave the impression of a tremendous victory, which provided a much needed shot in the arm to Allied morale.

Victory, it was indeed for the United States—not in comparative damage inflicted on the enemy, but in objectives gained. The effects of the battle could not accurately be judged until later in the war.

The Battle of Midway

On 4 Jun 1942, when the attack on Midway began, the cards were stacked heavily in favor of Japan. Her aces were four aircraft carriers which were 180 miles offshore when first spotted.

All planes on Midway were ordered into the air to meet the impending attack and the island's antiaircraft batteries opened up as soon as enemy planes came within range.

The Japanese losses in the first encounter were heavy, but so was the damage done to the island's defenses. Within a matter of minutes after the first bomb fell, everything above ground on Midway, except the runways which the Japanese themselves expected to use, had been destroyed. Worse still, half the island's defending planes had been lost and not one Japanese vessel had been damaged.

RADM Raymond A. Spruance, USN, commanding Task Force 16, was on his way to Midway and intended to launch his planes within about 100 miles of the Japanese striking force.

When he learned of the attack, however, he ordered an immediate launching in the expectation that the American aircraft would find the Japanese planes on deck after their return from the strike on Midway.

The admiral's assumption proved correct, for the Japanese carrier decks were covered with refueling planes. As luck would have it, the planes from Task Force 16 were joined by planes which had been dispatched from RADM F. J. Fletcher's Task Force 17. The result was a smashing loss for the Japanese of all four of the carriers with which they entered the battle, in addition to one heavy cruiser and 253 aircraft.

The Japanese also lost 3500 men, including 100 first-line pilots which they could ill afford to lose.

On the American side of the ledger, one carrier and one destroyer were sunk and 150 planes were shot down. Three hundred and seven men lost their lives.

It was the first major defeat Japan had suffered since the 16th century and was the turning point of the war in the Pacific.

The Fight for Guadalcanal

The factor that brought about the decision to invade

Guadalcanal in August 1942 was the construction of a Japanese airbase on the island. It was discovered during U. S. operations aimed at the eventual capture of Rabaul.

A Japanese airbase on Guadalcanal could possibly turn back the Allied drive toward Rabaul and endanger the Allied base on Espiritu Santo, in the New Hebrides.

U. S. planners saw the airfield as a crucial point and believed that whoever initiated attack from it or against it might well emerge victorious from the Solomons venture.

The importance of the airfield is attested by the fact that the offensive against Rabaul was nearly sidetracked in what became largely an effort to take Guadalcanal. As part of that effort, the U. S. and Japanese navies clashed violently in the sea battles of Savo Island, the Eastern Solomons, Cape Esperance, Santa Cruz, Guadalcanal and Tassafaronga.

Even to summarize here the various phases of the campaign for Guadalcanal would not be feasible because of the length of the fighting and the complexity of operations.

It will suffice to say that, by the time the Japanese became reconciled to the United States' seizure of Guadalcanal, Japan had so weakened herself on the sea and in the air that the initiative passed to the United States for the remainder of the war.

Thereafter, the Japanese efforts were limited to selling their remaining real estate at the highest possible price; attempting to supply their troops (not too successfully); and finally, withdrawing them from untenable positions.

The Solomons Offensive

The Japanese defeats at the Battles of the Coral Sea and Midway, before the Guadalcanal campaign, had already caused the Imperial High Command to stop and evaluate the offensive capability of its armed forces.

In the final analysis, they decided that U.S. naval opposition made offensive operations impracticable. They therefore called off their invasions of New Caledonia, Fiji and Samoa, giving priority to the strengthening of their defensive perimeter. The success of the American offensive on Guadalcanal was to demonstrate that they had already bitten off more than they could chew.

The Allies, now that Guadalcanal was in their hands, could take further steps to eliminate the threat posed by the Japanese base at Rabaul. The plan adopted called for one thrust up the central and northern Solomons, coordinated with another up the southeast coast of New Guinea. The two advances were to converge on Rabaul.

In this operation, which lasted over six months, the fighting was fierce on land, sea, and in the air, with control passing from one side to the other. During this period the Navy made great strides in the techniques of amphibious warfare, and it also met the Japanese Navy in a series of hard-fought sea actions which included the battles of Kula Gulf, Kolombangara, Vella Gulf, Vella Lavella, Empress Augusta Bay and Cape St. George.

The loss of equipment and life was tremendous on both sides. Materiel losses were much more serious to the Japanese, who had little or no possibility of replacement.

To the United States, the greatest flow of materiel was yet to come.

Rabaul was neutralized at about the same time that Tarawa fell into American hands (November 1943). In general, all fronts in the Central Pacific were thereafter joined.

CHANGE OF COMMAND — Boarding party of Navymen prepare to bring captured German U-boat back to U.S.

The Battle for the Atlantic

Immediately after our entry into the war against Germany, German submarines began making themselves felt off our eastern coast. After a slow start due to a shortage of antisubmarine escort craft, East Coast shipping was provided with protection against submarine attack, making the hitherto unprotected shipping lanes far less profitable for German efforts.

This factor, and the invasion of northwest Africa in November 1942, caused German submarine activity to be shifted to mid-Atlantic, where the risk was less and the quarry larger in the form of big transatlantic convoys.

The number of merchantmen sunk by German subs rose from two a day to five a day in the first three months of 1943. The figures quickly reversed themselves to a ratio more favorable to the Allies when they began the extensive use of naval air in the detection of submarines.

Allied planes were equipped with radar which enabled them to detect a surfaced submarine, whereas the submarine had no way of detecting the plane until it was often too late.

Since its antiaircraft guns were not effective, the only escape path open to the sub was a quick underwater getaway which it often failed to make.

The emphasis by the United States on the hunter-killer group, which replaced the convoy-escort groups, accounted for the sinking of numerous submarines.

Shortly before the German collapse, improved German submarines led to renewed concentration off the east coast of the United States.

A report that bomb-carrying rockets might be launched against New York from German submarines brought strong countermeasures. In April 1945 a powerful force of destroyers and destroyer escorts pursued the German subs to mid-Atlantic, killing six along the way at the cost of one destroyer escort.

Before the fighting in Europe ended, the American antisubmarine forces scored 177 kills, with an additional 16 kills through joint effort with other Allied nations. Altogether, Germany lost 750 subs.

Normandy

During the night preceding D-Day in Normandy, in

ON TARGET — U.S. ships soften Korean shore positions.

weather so foul that the German High Command was convinced invasion was impossible, an incredible armada crossed from the points of embarkation in England to Normandy. The United States alone deployed 1000 ships and other sizable craft.

Ahead of each large group leaving England, minesweepers spearheaded the crossing to France and then swept the anchorage grounds.

When dawn broke on 6 Jun 1944, transports and larger landing craft were anchored and had disembarked assault troops into smaller craft. Battleships and cruisers were lying at anchor closer to shore and destroyers were closer still.

As the troops stormed ashore, naval gunfire countered the fire from onshore guns. During the next four days naval gunfire frequently cleared the way for the push inland.

When the advance inland was established, a fleet of old merchant ships (gooseberries); enormous concrete caissons (phoenixes); and large cross-shaped steel floats (bombardons)—only the heads of which could be seen above water—set sail from England. Their purpose was to create a harbor where none existed.

It took this extraordinary fleet one night to get into position and construction began the following afternoon.

The line of merchant ships was sunk in an arc out from the shore. This line was extended by the caisson phoenixes which were sunk so their flat surfaces protruded above water. Outside the then created harbor was a breakwater of floating bombardons. Floating metal piers which could rise and fall with the tide extended out into the harbor from the beach.

Soon the harbor was open for business, and unloading proceeded rapidly until the worst storm in 50 years nearly destroyed the American ersatz harbor.

One built in the British sector under the lee of Cap de La Hève sustained only minor damage and shipping was routed through it.

Meanwhile, events ashore progressed to the point at which troops were in a position to besiege Cherbourg in order to obtain permanent harbor facilities.

The city was under fire from the land and from the guns of USS *Nevada* (BB 36) and British and American cruisers. The city fell within a matter of a few days.

With a permanent harbor, from which troops in France could be replenished and supplied, the invasion could proceed for a drive on the channel ports, Paris, the Low Countries and eventually on to the Ruhr.

The Philippine Sea

On 16 Jun 1944, the morning after United States forces landed on Saipan, an American submarine spotted the main units of the Japanese Fleet in the Philippine Sea.

The situation on Saipan was still critical, and the importance of the island to the Japanese almost insured U. S. forces an engagement with the Imperial Navy.

The first Japanese attack was met on 19 June by fighters from United States carriers which kept all but about 40 planes away from the ships. Most of the 40 which penetrated the fighter screen were dispatched by the ships' guns. At the end of the attack, the battle efficiency of none of the American ships was seriously impaired.

In the evening, U. S. planes intercepted a large group of planes on its way to Guam. Our fighters followed and shot them down when they were about to land.

It was a successful day for the Americans. A grand total of 402 Japanese planes had been destroyed. The action came to be called "The Marianas Turkey Shoot."

The enemy had also suffered heavy losses at sea. Two large carriers had been sunk by submarines.

The Japanese Fleet withdrew and was about to make good its escape when it was sighted nearly out of range of American carrier planes. A deck-load of planes was dispatched and made contact late in the afternoon.

Twenty-two of the 35 interceptors the Japanese sent up were shot down by U. S. fighter planes. The ship toll to the Japanese after the attack was one aircraft carrier, two fleet oilers and damage to four carriers, a battleship, a cruiser and an oiler.

The United States planes returned in the direction of their home carriers, but it was nightfall before they reached their destination. The carriers risked submarine attack and used their searchlights as beacons. Most of the planes succeeded in landing.

Leyte Gulf

The Japanese faced the Battle of Leyte Gulf (23-26 Oct 1944) with desperation. American submarines had harassed their shipping to the point where fuel shortages were seriously hampering operations.

If the Japanese lost at Leyte Gulf it would mean the loss of the Philippines. The lifeline between the home islands and the East Indies would be cut. The Mobile Fleet would be divided between its fuel supply in the south and its repair facilities in the north, thus insuring its defeat and making a blockade of the home islands possible.

The Japanese hoped to sink Allied amphibious ship-

BEACH PARTY — Marines head for assault on Inchon.

ping in the Battle of Leyte Gulf. They failed miserably. They lost three battleships, four carriers, 10 cruisers and nine destroyers—about 306,000 tons in all.

The Americans lost one light aircraft carrier and two escort carriers, two destroyers and a destroyer escort, totaling 37,000 tons.

Each segment of the American Fleet performed brilliantly, taking advantage of the catastrophe suffered by the Japanese.

In addition to its ship losses, the Japanese lost 350 airplanes and, worse still, they lost the skill of the pilots who flew them.

Discouragement concerning their own losses, coupled with the growing American air power, caused the Japanese for the first time to use the kamikazes—suicidally inclined pilots who used their bomb-laden fighter planes as weapons, diving at their target in the hope of obliterating it and with the certainty of obliterating themselves.

Subs vs. Japan

Too much cannot be said in praise of the United States submarine effort in the Pacific. The obstacles which submariners faced were formidable.

They generally had to travel some 3000 monotonous sea miles before they reached the Japanese shipping lanes; their living quarters were cramped, noisy and badly vented. The risks were great.

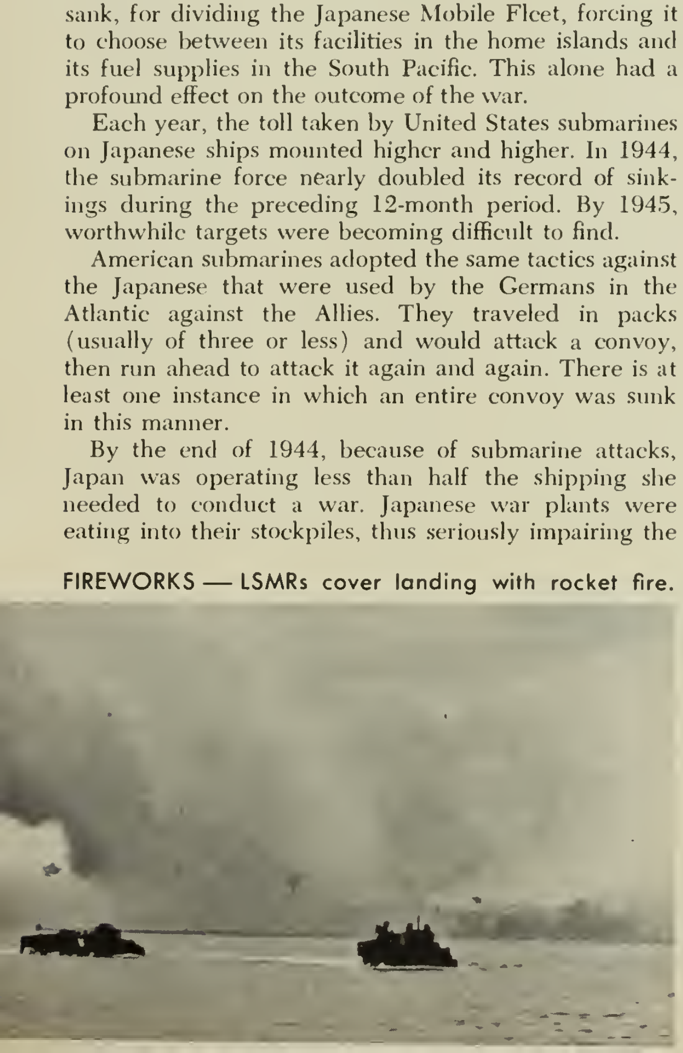
In spite of these difficulties, submarines spearheaded the United States advance in the Pacific and were responsible, through the large number of tankers they sank, for dividing the Japanese Mobile Fleet, forcing it to choose between its facilities in the home islands and its fuel supplies in the South Pacific. This alone had a profound effect on the outcome of the war.

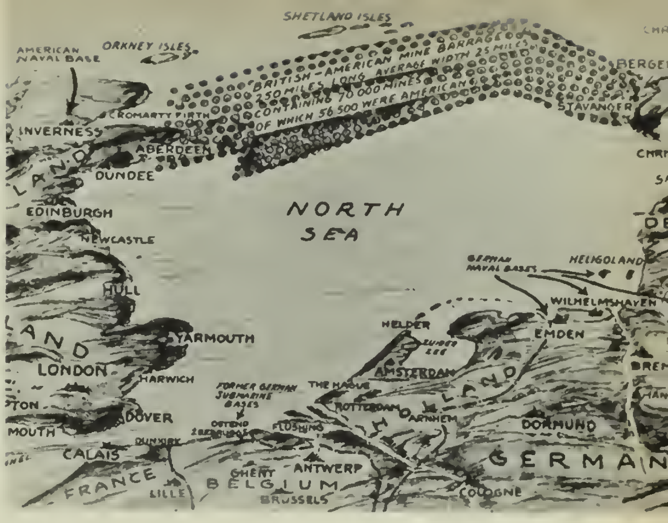
Each year, the toll taken by United States submarines on Japanese ships mounted higher and higher. In 1944, the submarine force nearly doubled its record of sinkings during the preceding 12-month period. By 1945, worthwhile targets were becoming difficult to find.

American submarines adopted the same tactics against the Japanese that were used by the Germans in the Atlantic against the Allies. They traveled in packs (usually of three or less) and would attack a convoy, then run ahead to attack it again and again. There is at least one instance in which an entire convoy was sunk in this manner.

By the end of 1944, because of submarine attacks, Japan was operating less than half the shipping she needed to conduct a war. Japanese war plants were eating into their stockpiles, thus seriously impairing the nation's ability to wage war. In short, the submarines had insured the collapse of Japanese industry.

FIREWORKS — LSMRs cover landing with rocket fire.





BIG JOB—WWI North Sea mine barrage looked like this.

By the end of the war, United States submarines had sunk 4,779,902 tons of merchant shipping. They had also sent to the bottom 201 naval units, totaling 540,000 tons.

In spite of the conspicuous lack of the comforts of home on board, submariners displayed a devotion to their boats which is incomparable. Many of them gave up their well-earned rest periods rather than take a chance of being assigned to a surface-type ship.

This was in spite of the fact that 16 per cent of submarine officers and 13 per cent of enlisted men were lost during the fighting in the Pacific.

The Okinawa Campaign

The Kamikaze Corps of suicide-bent Japanese represented the substitution of fanaticism for military capability. They had been known and dreaded by U. S. Navymen for some time, but nowhere did they present such a threat as during the operations at Okinawa.

Kamikaze pilots would dive their battle-worn and sometimes decrepit planes into the target with no thought of saving themselves or their planes. Their one object was to plant the bomb they carried on whatever target they selected. Later, man-guided bombs were released on American targets from the undercarriages of Japanese planes.

In one day (6 Apr 1945), between 350 and 400 kamikaze planes took off from airfields on Kyushu to attack U. S. shipping off Okinawa. About half of them were intercepted and shot down by U. S. carrier air groups before they reached the island, and when the survivors got to the amphibious force they were met by more U. S. planes and such heavy flak that United States personnel were in danger of the falling fragments from their own fire. This reception accounted for another 100 attackers, but the rest still managed to do considerable damage.

Another type of suicide attack was attempted that day by a Japanese battleship, a cruiser and eight destroyers from the Inland Sea, carrying enough oil to reach Okinawa but not enough to return to Japan.

When they reached their destination, they were to beach themselves and shoot until they were out of ammunition or destroyed.

United States planes let the ships come close enough

(*Continued on page 58*)

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

BRITISH LAUNCH—Flight-deck crew on board *USS Forrestal* (CVA 59) ready British *Scimitar* jet for launch during cross-deck exercises.

Worden Is the Latest Word

About the latest thing in destroyer types is the guided missile frigate *Worden* (DLG 18). *Worden* is so new she isn't even in commission.

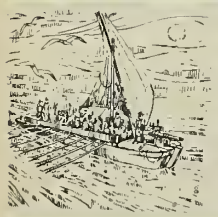
The frigate, which weighs in at 5670 tons, was launched this summer at Bath, Maine. She won't be ready for commissioning until next year. When she does join the Fleet, however, she'll bring a lot of punch with her. The sleek, 535-foot ship will be armed with two dual *Terrier* ship-to-air missile launchers and the *Asroc* antisubmarine weapon system, plus 3-inch guns and antisubmarine torpedoes. She'll also be equipped with a helicopter landing platform and the latest in search and detection devices for her varied missions.

The ship is named in honor of Rear Admiral John L. Worden, who commanded the ironclad *Monitor* during her historic Civil War clash with *Merrimac*. Admiral Worden also served as superintendent of the U. S. Naval Academy (1869-1874).

The new frigate is the fourth ship of the Fleet named *Worden*. The first, a torpedo boat destroyer, was built 60 years ago and served the Navy for 17 years. The second (DD 288) was commissioned in 1920 and served for 11 years.

The third *Worden* (DD 352) joined the Fleet in 1935. She saw action in the Pacific during World War II before running aground in the midst of a storm off the coast of Alaska in January 1943.

YESTERDAY'S NAVY



On 1 Dec 1944 the naval operating base at Kwajalein was established. On 2 Dec 1941 the U. S. merchant ship *Dunboyne* received the first naval armed guard crew. On 10 Dec 1941 the Cavite Navy Yard, P. I., was heavily damaged by Japanese air attack. On 11 Dec 1775 a committee was appointed by Congress to devise ways and means of furnishing the colonies with naval armament. On 18 Dec 1807 Congress authorized the construction of 188 gunboats. On 31 Dec 1941 Admiral (later Fleet Admiral) Nimitz assumed command of the Pacific Fleet.

NATO Naval Exercise

U. S., French, British and Portuguese ships of NATO's Striking Fleet Atlantic have completed *Operation Riptide III*, a four-day exercise to develop inter-navy readiness under wartime conditions.

Carrier-based aircraft conducted simulated nuclear and conventional strikes as well as a cross-deck exercise.

A cross-deck exercise consists of landing planes on carriers of countries other than their own. The British carriers HMS *Hermes* and HMS *Centaur* and the U. S. carriers USS *Forrestal* (CVA 59) and *Enterprise* (CVAN 65) exchanged planes, fueled and serviced them, and sent them back to their parent carriers.

In addition, each plane was armed with the other nation's weapons in a demonstration of interchangeability. (The armament was dropped by the planes before landing.) Helicopters of the U. S., United Kingdom and France also took part in the cross-decking.

In a less dramatic, yet no less important maneuver, surgeons and other medical personnel were exchanged between ships, as if a real emergency called for inter-ship medical assistance. In this, as well as other phases of the exercise, the participating navies attempted to make the four-nation force as interchangeable as possible.

Award Winners

Winners of the Chief of Naval Operations special award for aviation safety and the Arleigh Burke Fleet trophy have been selected for fiscal 1962.

In addition, USS *Gyatt* (DDG 1) has won the CRUDESLANT award for proficiency in antiair warfare, and USS *Blandy* (DD 943) earned the award for outstanding capability in antisubmarine warfare for fiscal 1962.

The Arleigh Burke Fleet trophy is presented annually to the ship in the Atlantic and the ship in the Pacific Fleet that has achieved the greatest improvement in battle efficiency over the past fiscal year. This year USS *Forster* (DER 334) won the Pacific

Fleet trophy. *Forster* is homeported at Pearl Harbor and is a unit of Escort Squadron Five. USS *Vesole* (DDR 878) is the Atlantic Fleet winner.

The amphibious assault ship *Valley Forge* (LPH 8) received the CNO aviation safety award. During the past competitive year, 12,636 safe landings were made aboard her. She is now with the Seventh Fleet.

Marjorie Sterrett Awards

Fourteen ships have been selected to receive the Marjorie Sterrett Battleship Fund Awards for fiscal 1962. The ships, seven from the Atlantic and seven from the Pacific Fleet, were named by their respective type commanders on the basis of the annual battle efficiency competition. The awards now go to one ship from each type command.

Marjorie Sterrett prize money is assigned to recreation funds of the winning ships and used for the benefit of the ships' enlisted men.

Here are the Pacific Fleet winners: *Bon Homme Richard* (CVA 31), *Providence* (CLG 6), *Rupertus* (DD 851), *Prime* (MSO 466), *Paul Revere* (APA 248), *Arikara* (ATF 98), and *Sargo* (SSN 583).

Winners in the Atlantic Fleet are: *Lake Champlain* (CVS 39), *Newport News* (CA 148), *Joseph K. Taussig* (DE 1030), *Entemedor* (SS 340), *Amphion* (AR 13), *Grant County* (LST 1174), and *Exploit* (MSO 440).

New Ships Named

Names have been assigned to four guided missile frigate hulls (DLGs 27, 28, 29 and 31) now under construction at shipyards in the states of Maine and Washington and two combat store ships (AFSs 1 and 2) being built in California.

DLG 27 will bear the name of *Josephus Daniels*, the North Carolina journalist who served as President Woodrow Wilson's Secretary of the Navy from the year 1913 to 1921.

ARLEIGH BURKE Fleet Trophy, for most improvement in battle efficiency during fiscal '62 in Atlantic, goes to USS *Vesole* (DDR 878).

It was during his administration of the Navy that service schools were established on board ships and stations for officers and enlisted men.

Daniels favored the appointment to commissions of men from the enlisted ranks and inaugurated the practice of making 100 enlisted men eligible for entrance into the Naval Academy each year.

Wainwright, the name with which DLG 28 will be christened, is the family name of five men who served the Navy well: CDR Jonathan M. Wainwright (1821-1863), his son, ENS Jonathan M. Wainwright, Jr., (1849-1870), their cousin, CDR Richard Wainwright (1817-1862), his son, RADM Richard Wainwright (1849-1926) and grandson, CDR Richard Wainwright (1881-1944).

Two U. S. Navy destroyers (DD 62 and DD 419) have already borne the name *Wainwright.*

DLG 29 will bear the name of RADM James E. Jouett (1826-1902) who distinguished himself in action against the Confederate Navy during the Civil War.

As with the Wainwrights, two destroyers (DD 41 and DD 396) have borne the name *Jouett.*

Sterett, the name assigned to DLG 31, honors LT Andrew Sterett (1760-1807) who commanded the schooner *Enterprise* against French privateers and Tripolitan pirates in the Mediterranean.

The name *Sterett* has also been borne by two destroyers in the past (DD 27 and DD 407). The latter was awarded the Presidential Unit Citation for action against the enemy during the Battle of Guadalcanal in November 1942.

The two combat store ships now abuilding in California will be named *Mars* (AFS 1) and *Sylvania* (AFS 2).

They are the first of a new type which will eventually replace the present store ships (AF), the general stores issue ships (AKS) and the aviation supply ships (AVS) in underway replenishment operations.

The AFS types will carry a variety of items, including fresh provisions, general stores and aviation supplies. They will also carry two cargo helicopters and will be armed with four 3-inch/50-caliber twin gun mounts.

COOL GREETING — Nuclear subs *USS Skate* (SSN 578) and *USS Seadragon* (SSN 584) rendezvous at North Pole.

ROUND THE HORN — USS *Constellation* (CVA 64), shown here on her highly successful shakedown cruise in Atlantic, is now with Pacific Fleet.

Constellation Shakedown

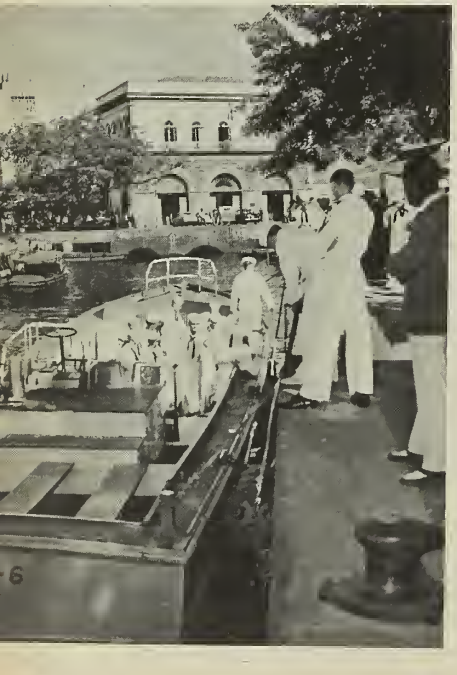
The shakedown cruise of USS *Constellation* (CVA 64) off Guantanamo Bay, Cuba, earlier this year, has been termed a success. How much of a success may be indicated by some of the statistics recorded during her vigorous operational readiness trials.

Constellation, last of the six *Forrestal*-class carriers to be constructed, began test operations last January. By early May she had, among other things:

- Become the first carrier to launch *Terrier* surface-to-air guided missiles. In the process she recorded 11 hits out of 15 attempts.
- Chalked up more than 3500 arrested landings.
- Steamed nearly 25,000 miles.
- Received "outstanding" marks in her Navigational Ship Control and Rescue Assistance departments.
- During a low visibility exercise performed the smallest fixed error position (41 yards) of any large combat ship ever to undergo operational readiness tests at Guantanamo Bay.
- Received "excellent" marks in her Electronics, Medical and Communications departments. (The Fleet Training Group officer who graded the Communications department said its mark was the highest he had given any ship during his 29 months as an area inspector.)

Constellation has been assigned to the Pacific Fleet. Her home port is San Diego, Calif.

LIBERTY BOUND — Navymen of USS *Constellation* (CVA 64) leave liberty launch at Fleet landing and head for a tour of Rio de Janeiro.



Carriermen Visit Rio

Men of USS *Constellation* (CVA 64) say that Rio de Janeiro has the best liberty in the world. They should know, because *Constellation* had a four-day stay there on her way around South America to her new home port of San Diego.

Crew members ashore in Rio found that across the street from rows of first-class hotels were several beaches—Gavea, Ipinema, Flamengo, Leblon, and the Copacabana with its mile-long crescent of white sand. And they learned that for $2.50 they could get a first-class hotel room complete with continental breakfast.

Information booths on the pier gave tips on what to see in the city. Many *Constellation* sailors visited Corcovado Peak to see the statue of Christ, and others took the cable-car ride to the top of 1200-foot Sugarloaf Mountain for a panoramic view of Rio and the surrounding area.

But it wasn't all play.

One-hundred-twenty-eight officers and men gave blood to the Rio blood bank. *Constellation*'s first class petty officers invited 120 underprivileged boys aboard for movies, ice cream, cake and soft drinks, and bought each boy a *Constellation* T shirt.

A *Constellation* softball team defeated a Rio all-star team 10-0, and Air Squadron VAH-10's basketball team downed a Brazilian five 45-33.

More than 20,000 visitors came aboard during the four-day visit and 15,000 Portuguese-language welcome aboard pamphlets were distributed.

For many Brazilians, one of the highlights of the tour of *Constellation* was seeing themselves—live—on television. The ship's closed-circuit TV system was put in operation in the hangar bay, with a camera beamed on the people, who watched themselves on a receiver placed nearby. Crewmen below deck watched the hangar bay proceedings via their compartment receivers.

On the final day of the port visit, after the tours of the ship were over, crewmen found these words scribbled on the desk in deckhouse three: "Remember of Brazil. This ship is wonderful. Good return your country. God help you and family."

Pre-Commissioning Training

When a new-construction or reactivated U. S. Navy ship is scheduled for commissioning on a certain date, that ship's crew doesn't just wander aboard en masse on commissioning day. The resultant chaos would definitely not be in the best tradition of the Navy.

Obviously, some previous training and organization are called for. In

DIAMOND HEAD and the city of Honolulu provide scenic background for *USS Kitty Hawk* (CVA 63) in the Pacific.

the Atlantic Fleet, such essentials are furnished by the Pre-commissioning Training Department of the Fleet Training Center, Norfolk.

Pre-commissioning crews are divided into two groups, the nucleus crew and the balance crew. The nucleus crew—selected, experienced officers and key petty officers—is ordered directly to the building shipyard or reactivating activity some weeks before the commissioning date. They assist in assembling outfitting materials, witness tests of machinery and equipment, and thoroughly familiarize themselves with the ship, so that they can serve as on-the-job instructors to the balance crew when it reports.

Meanwhile the balance crew, comprising approximately 80 per cent of the ship's personnel allowance, reports to FTC Norfolk. There, each man is interviewed to determine his qualifications and experience, and is briefed on the pre-commissioning program, the various schools which will be required, and station orders and regulations.

Every officer and enlisted man in the balance crew is required to attend fire-fighting, damage control and ABC defense schools. Gun crews are formed and trained at the Fleet Anti-Air Warfare Training Center, Dam Neck, Va. CIC teams, communications personnel and repair parties receive practical training at the Fleet Training Center, while boat crews are formed and trained at the Norfolk Fleet Boat Pool.

Togetherness—one of the best ways to build morale and ship's spirit—is emphasized during this period. Each balance crew is quartered in its own barracks, organized by departments and divisions, and receives practical and team training together. It works, too. Men who have never laid eyes on their prospective new duty station are oftentimes overheard bragging that their ship is the best in the Navy.

While the balance crew is training, the prospective executive officer supervises the operation of a paper mill which turns out all of the organizational material necessary for the future operation of the ship. This includes the ship's organization manual, ship's regulations, CIC doctrine, battle bill, cleaning bill and berthing bill. The Pre-commissioning Training Department maintains a complete library, containing all of the necessary publications and reference material to aid the prospective executive officer in accomplishing this task.

About a week before the commissioning date, the balance crew is transferred to the building or reactivating site. There, they join the nucleus crew and are molded into a ship's company, ready to undergo shakedown training.

Since its establishment in September 1953 the Pre-commissioning Training Department, Norfolk, has provided training for the prospective crews of 77 ships. In 1961 alone more than 10,000 Navymen assigned to 16 ships scheduled for reactivation or commissioning were trained there. They included the crews of the aircraft carriers USS *Constellation* (CVA 64) and *Enterprise* (CVAN 65), plus 10 ships reactivated as a result of the Berlin crisis.

—LCDR L. J. Tucker, USN.

TOP RIGGER — *USS Lake Champlain* (CVS 39) claims Atlantic Fleet record for rigging Davis (S2F) barrier with a time of 59 seconds.

SCHOOL DAYS — FTG, WestPac, keeps Navymen of the Seventh Fleet in the know with a variety of classes at Yokosuka. *Left:* Class is conducted in sonar methods. *Rt:* Students practice at radioman school.

It's a Small World

Running across an old shipmate after a 17-year separation is not unheard of in this world—but when that old shipmate is a torpedo, it does become a mite unusual.

Back in April 1945, when both the world and Chief Quartermaster (SS) James Kirkland were younger, he headed out of Pearl Harbor for the western Pacific on board USS *Springer* (SS 414). *Springer* was bound for her second war patrol, and Kirkland was making his seventh of a total of eight such patrols.

It was a highly successful venture, for *Springer* expended almost all of the torpedoes in her forward torpedo room. One of the few left aboard when the sub finally turned back toward Pearl again was a Mark 14, Mod 5, bearing the serial number 26718.

Back at Pearl, Kirkland and the torpedo went their separate ways. And the path that torpedo somehow followed to wind up in Charleston, S. C., 17 years later is unclear.

Get there it did, however, some way or other. And you could have bowled the chief over with a feather when he idly checked over the serial numbers of a load of torpedoes aboard his current ship, USS *Harder* (SS 568), one day late the past summer. Among them, slightly the worse for wear but still going strong, was old tin fish, serial number 26718.

HELLO AGAIN — Chief Quartermaster (SS) James Kirkland poses on board USS *Harder* (SS 568) with torpedo he last saw during World War II.

Fleet Training Group, WestPac

Thousands of Seventh Fleet Navymen go to school in the Far East every year—some ashore in Japan, others at sea. Teaching them is a big job, one which you might well suppose would require the services of a whole raft of instructors. It doesn't, though—simply because the 36 Navymen who staff the Fleet Training Group, Western Pacific, are just about as efficient and hardworking a batch of teachers as you'll find anywhere.

The westernmost outpost of the Navy's Pacific Fleet Training Command, FTGWP furnishes both underway training for Seventh Fleet ships and training courses ashore which vary in length from one day to 12 weeks.

In providing its particular brand of sea-shore pedagogy, FTGWP forms one of the Navy's more unusual organizations. Normally training at sea is conducted by Fleet training groups, while training ashore is provided by Fleet training centers.

An average of 13 Japan-based U. S. ships are given the three-week underway refresher training course each year, normally just after a ship has completed an extensive shipyard overhaul period. During those three weeks an FTGWP team guides and supervises all manner of shipboard exercises with a two-fold aim: To bring the ship to its highest possible degree of combat readiness in the short time available, and to assist the ship in developing its own internal self-training program.

FTGWP's scheduling office lines up training areas for both U. S. and foreign ships off the coasts of Japan and Okinawa, and also handles some

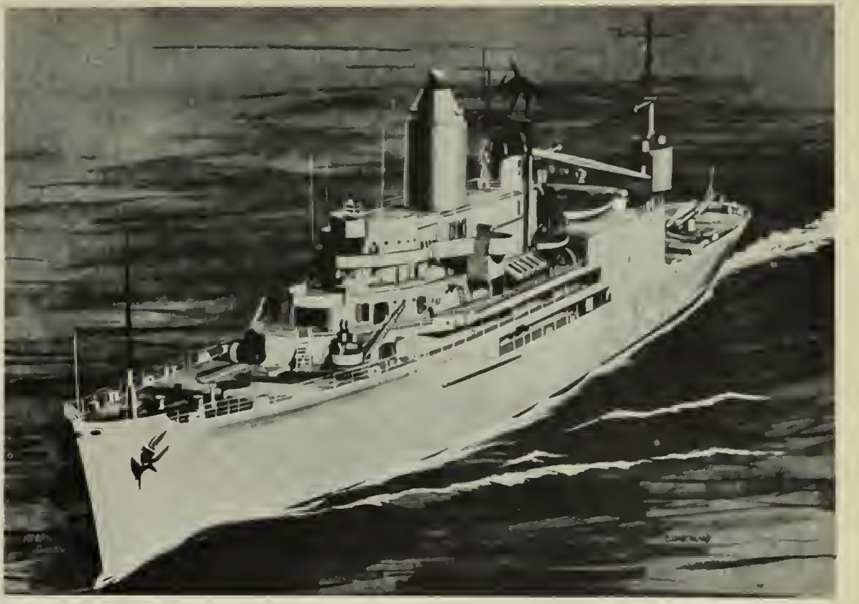
20 requests per day for towed surface targets, radio-controlled target aircraft and plane-towed targets for antiaircraft drills.

Among the 14 courses conducted ashore are a motion picture operator's course; a gunnery tracking school which includes a half-day course in Navy gunpointing systems and another half-day course in naval gun loading; a five-day course in the principles of naval leadership; a 12-week radio operator's school and a signalman school. There is also a dual-scanning sonar attack teacher—an intricate hunk of equipment which permits students to simulate an attack on a mock submarine target, learn modern methods of submarine tracking and practice the correct method of moving in for the kill.

FTGWP's firefighting school (the only one in the Far East) is located in a remote section of the base, and consists of a classroom, maintenance space, fire tank and boiler room mock-up. The one-day course begins with films on firefighting techniques and the chemistry of fire, and ends with students extinguishing simulated shipboard fires in both the mock-up and open tank.

FTGWP instructs more than 500 Navymen ashore each month. The courses are taught by the same men who conduct refresher training at sea, and thus the ashore courses are often suspended while sea training is in progress. In addition, a large number of Japanese Maritime Self-Defense Force personnel attend the courses each year.

Cecil G. Smith, JO3, USN.



NEW SOUND — Artist's conception shows how USS *Norton Sound* (AVM 1) will look when converted to test ship for *Typhon* weapons system.

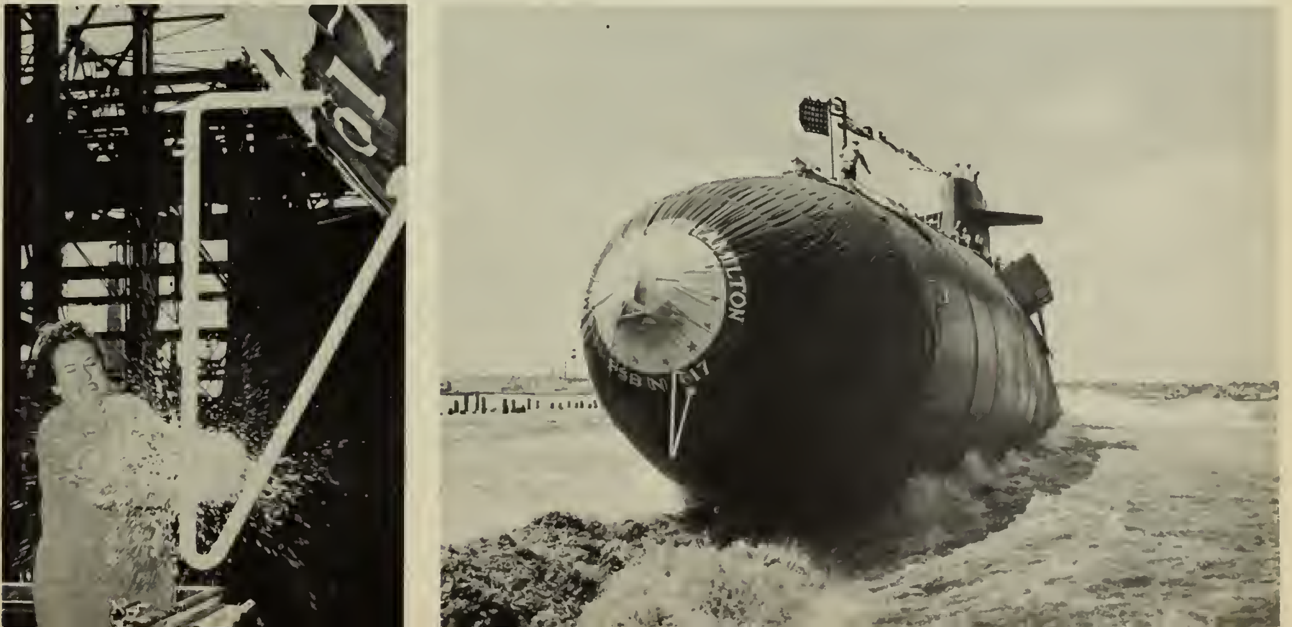
Norton Sound Gets *Typhon*

A weapons system which incorporates recent improvements in the *Tartar* and *Talos* guided missiles is being installed in USS *Norton Sound* (AVM 1). The new weapon has been called *Typhon*. The name supersedes the designation of Advanced Weapons System formerly used to identify improved *Tartar* and *Talos* missile gear. Super-*Talos* will be renamed Long Range *Typhon*. Super-*Tartar* will be Medium Range *Typhon*.

The radar designed for *Typhon* outperforms systems in present use. The *Typhon* weapon control system will consist of advanced long-range search, track and guidance radar, high-speed computers which provide faster target selection and designation, and display and monitor gear. The system will extend the range and improve the accuracy, target-handling capacity and reaction time of future guided missile ships.

Norton Sound is no stranger to missile projects; the ship has played a major role in the development of a wide variety of Navy guided missiles. She was commissioned a seaplane tender in 1945, but in 1948 underwent conversion to the guided missile ship status. *Norton Sound* has served mainly as a floating laboratory and launching platform for high-priority missile projects. Her present conversion will take place in a shipyard at Baltimore, Maryland.

DOUBLE SPLASH — Champagne and water foam high as *Polaris* submarine *Alexander Hamilton* is launched.



CABLE LAYER—USS *Aeolus* (ARC 3) slices through calm seas while lending support to Logistics Service Group, U. S. Atlantic Fleet.

New AGOR Is Launched

Number three of a new class of United States Navy oceanographic research ships has been launched. She is *Charles H. Davis* (AGOR 5).

The other two similar ships are *Robert T. Conrad* (AGOR 3) and *James M. Gillis* (AGOR 4).

Like her predecessors, *Davis* is 209 feet long and accommodates a crew of 22 officers and enlisted men, plus 15 scientists who are assigned by the Navy Hydrographic Office.

The scientists will conduct studies of underwater acoustics and will collect meteorological data for the U. S. Naval Underwater Sound Laboratory's west coast offices.

The new AGOR was named for the late RADM Charles H. Davis, USN, and for his son RADM Charles Davis, II, USN, also deceased. The senior Davis is known for his sponsorship of the National Academy of Sciences and for his efforts in establishing the *American Ephemeris* and *Nautical Almanac*. He also won repute for his studies of the dangerous waters around Nantucket.

The younger Davis was superintendent of the Naval Observatory, a post once held by his father, and worked with several expeditions studying longitudinal differences by means of submarine telegraphic cables.

Three other ships, (TB 12), (DD 65) and (DD 395), had been named for the senior Davis. The new AGOR is the first ship named in honor of both the deceased rear admirals.

Sara Modified

The attack aircraft carrier USS *Saratoga* (CVA 60) is being modified to handle heavier aircraft and give pilots greater safety in landing than before.

A change in the arresting gear will enable her to handle heavier aircraft, and installation of the new PLAT (Pilot Landing Aid, Television) system will give a greater measure of safety to pilots.

The carrier is undergoing the modifications at Norfolk Naval Shipyard, Portsmouth, Virginia.

Army's Gift to Navy

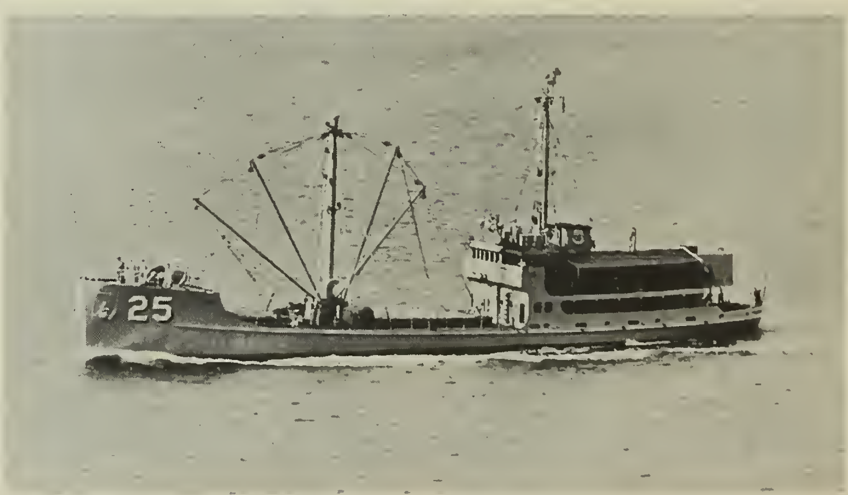
There are a lot of bigger ships in the U. S. Navy, and most of them get to play more exciting roles—but still and all, USS *Banner* (AKL 25) holds a distinction precious few other craft can claim. She's one of a kind.

Banner, you see, is a rare breed of ship, for she originally belonged to the U. S. Army. She's the last of her class remaining on active commissioned service, and, as she chugs busily along from island to island in the western Pacific these days, she's preventing the door from closing completely on one brief page of Navy history.

Banner came into this world back in 1944 as an Army cargo carrier bearing the name *Captain William Galt*. Her mission then was to supply islands in the Gulf of Mexico.

When the Korean conflict erupted, the Navy acquired *Captain Galt* and her sister cargo carriers, and designated them as light cargo ships. *Galt* became USS *Banner* in November 1952, after minor conversion at Pearl Harbor.

Banner and her sister ships saw limited action in the waning days of the Korean conflict. In the years since the cease-fire, the others have one by one joined the mothball fleet, MSTS, or, in some cases, the fleets of allied countries. The 177-foot *Banner*, however, is still hard at work for the Navy. Operating between Guam and isolated ports in the Mariana-Bonin Islands area, she carries loads of general cargo to places not normally served by larger logistic ships of the U. S. Navy.



SEA LOADER — Toy-like appearance of USS *Banner's* (AKL 25) hoisting gear belies strength she uses to load and unload cargo.

HAPPY BIRTHDAY — *USS Sheldrake* (AGS 19) celebrated the 20th anniversary of her commissioning. The former AM is with Navy Hydrographic Office.

Sunnadin's Replacement

Life on board a tug is pretty work-a-day, and duty in uss *Sunnadin* (ATA 197) at Pearl is no exception. Sometimes there isn't much to do and other times there's too much. Her crew members, like most other people, get up in the morning, go to work and trek home in the evening.

One day, however, *Sunnadin's* leading petty officer, BM1 Willis J. Judy, received some advance orders on Seaman A. J. Salen, who was to be transferred to *Sunnadin* from the U. S. Naval Air Station at Jacksonville, Fla.

The orders looked like any other 1A card. BM1 Judy had seen dozens of them, but there was something about this particular card which caused Judy's jaw to tighten its hold on the cigar it gripped and small beads of perspiration to stand out on his forehead.

Behind Seaman Salen's serial number stood a telltale "W" which, as any Navyman knows, stands for Wave.

Judy called his crew together for consultation. Everyone examined the card carefully. The "W" was there, all right; there was no mistaking that. But maybe it was just a typographical error, like the million-dollar tax refunds you read about in the paper sometimes.

Just to play it safe, Judy and his crew went out and bought some curtains for the portholes and scattered a few books authored by Emily Post and Amy Vanderbilt here and there. Even after being gussied-up, however, *Sunnadin* was still quite obviously a tug.

It wasn't long before Judy and his crew learned the awful truth. Seaman Salen was indeed a Wave, the initial "A" being for Alice. Her orders were canceled.

Judy and his crew regretfully removed the curtains from *Sunnadin's* portholes; stowed the copies of Amy Vanderbilt and Emily Post and sat back to wait for another crew member—male type.

Hospital Gets Navy Overhaul

When the word goes around that the Fleet's in, regardless of what language is used, it's usually good news for some kids.

Not long ago, when the ASW carrier uss *Randolph* (CVS 15) dropped anchor in the harbor at Palermo, Sicily, it was good news for the doctors, Sisters of Charity and the children at the Palermo Hospital for crippled children, where more than 250 youngsters afflicted with the ravages of polio and other paralytic diseases receive care and treatment.

The hospital was pretty well equipped with the necessities for treating its charges but the physical condition of the 200-year-old building left something to be desired.

Randolph's carpenters, glaziers, plumbers and electricians went to work with the various tools of their trade and made the place as bright as the smiles on the children's faces.

ON TARGET — USS *Sunnadin* (ATA 197) prepares to put out to sea with target sled for gunnery practice.

Of course, there was the customary party on board *Randolph* for the young patients who ate steak, ice cream and cakes with the crew. *Randolph's* cakes were facsimiles of the Italian and U. S. flags.

Before *Randolph* hove anchor, her CO made a little speech at the renovated hospital and signed the guest book in which the first entry was dated 1878.

Lexmen Round the Cape

Nowadays, relatively few ships choose to steam from the Pacific to the Atlantic, or vice-versa, by way of the stormy, rock-strewn waters off Cape Horn in southernmost South America. One of the few is the carrier uss *Lexington* (CVA 16).

Transferred from the Pacific Fleet to the Atlantic for conversion to CVS (support carrier) status recently, *Lexington* crossed through stormy Drake Passage within 100 miles of Cape Horn.

Lexington's Attack Squadron 52 took advantage of a brief spurt of comparatively fair weather by launching 36 AD-6 *Skyraider* aircraft—thereby becoming (according to *Lexington*) the first carrier to conduct air operations in the Cape Horn area.

By the time the unusual calm had lifted and Drake Passage was restored to her normal queasy self, the aircraft were safely back on board and the 40,000-ton carrier groaned on through gale winds, severe storms and heavy seas to the other side.

OF ALL PLACES — Pearl Harbor-based tug, *USS Sunnadin* (ATA 197), had a Wave assigned to her crew until mistake was noted and orders canceled.

Seaplanes with Hydrofoils

Successful test flights of an experimental seaplane equipped with a modern hydrofoil, conducted recently under the auspices of the Bureau of Naval Weapons at College Point, Long Island, N. Y., may someday result in a brighter and more expansive future for the Navy's flying boats.

The tests are aimed at discovering if the use of hydrofoils on seaplanes would aid and improve the performance of those craft in rough waters.

A JRF-5 *Goose*, loaned to the Navy by the Coast Guard, is being used as the test aircraft. It has been fitted with a supercavitating type of hydrofoil system, designed for extremely high water speeds. It is an adaptation of a hydrofoil system developed in France in the 1930s.

A single high-speed hydrofoil, mounted between two ventilating struts, is located directly below the plane's center of gravity and just forward of the hull step. Two skis, rigidly mounted on twin struts, extend beyond the bow to help stabilize the aircraft during take-offs and landings, and to prevent diving should the hydrofoil be damaged or destroyed.

The tests are confined entirely to high-speed runs and take-offs and landings, rather than conventional flights.

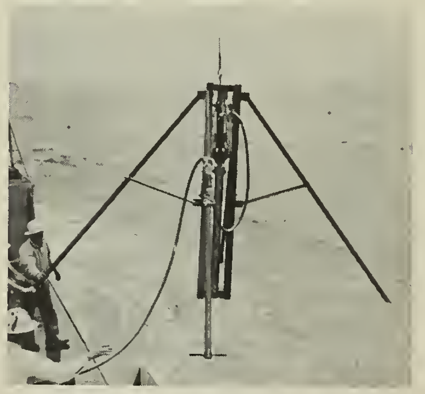
New Core Sampler Tested

The Navy is testing a lightweight, pneumatic core-sampling device that will make it possible to take undisturbed samples of hard ocean floor in deep water without using large drill rigs.

Designed and developed at the Naval Ordnance Laboratory in White Oak, Md., the 700-pound underwater rig obtained a core sample of coral and sand, four feet long and three inches in diameter, in 90 feet of water during a test off Fort Lauderdale, Fla.

Frequently, the Navy needs core samples to determine the suitability of an area for holding underwater ordnance tests. Analysis of undisturbed cores reveals whether or not the area will hold mine anchors which are driven into the bottom with explosives.

The new sampler is held in an upright position by a four-legged pyramidal frame about eight feet high. When the rig is lowered by cable from a ship, it settles squarely on the ocean floor. Once the sample is obtained, the entire rig is raised and the core is removed for analysis.



BOTTOMS UP — Lightweight pneumatic core sampler is lowered over side in tests off the Florida coast.

New Zealanders Get the Works

After a visit to Hawaii last summer, crewmen of New Zealand's HMNZS *Royalist* were confident their ship was at the peak of operational efficiency, if not the best cruiser anywhere. U. S. Navymen of the Pearl Harbor-based Pacific Fleet Training Group were inclined to agree. The Group had provided the New Zealanders with a 26-day course in engineering, damage control, communications, fire-fighting and gunnery.

The training was a "first" of sorts; *Royalist* was the first ship built and manned by a U. S. ally to enroll for instruction at FTGPac. (Navies of other nations have received instruction by FTG only when the ships were purchased from, or on loan from, the U. S.)

A short time earlier, *Royalist* had undergone a major refitting in Auckland. Many of her veteran crewmen had been transferred or discharged. Replacements included many inexperienced men who were unfamiliar with the equipment and operating procedures on board ship. Because of limited training facilities in New Zealand, RADM Peter Phipps, Chief of the New Zealand Naval Staff, requested the Pacific Fleet Training Group to provide underway training.

FTG was ready for *Royalist* when the cruiser arrived at Pearl Harbor. Underway training began on 9 Jul and continued until 27 Jul, the day before *Royalist* departed Pearl Harbor. During the period the cruiser worked with various Pacific Fleet units, including USS *Bon Homme Richard* (CVA 31). The training was, as FTG puts it, extensive. Only six of the 21 operating days were spent in port.

Damage control problems were made realistic by smoke-filled passageways. Refueling and supply replenishment at sea were practiced with Fleet oilers. Antiaircraft gunnery exercises were conducted with both prop and jet aircraft. The cruiser conducted shore bombardment exercises off the island of Kahoolawe, and practiced surface gunnery by firing at a target sled towed by a Fleet salvage ship. Communications drills, both in port and at sea, were conducted at all hours of the day and night.

Engineering casualties, man-overboard drills, aircraft intercept and tracking problems, maneuvering drills while acting as a screen ship, and moving independently through a mined area were other exercises.

The final day of training was spent in evaluating the *Royalist* crew. Improvement was determined by comparing after-training grades with the marks the ship received before her instruction, and *Royalist* showed a considerable increase in her degree of readiness.

—Chuck Brown, JO1, USN.

Slingshot Catapult Tested

A large-scale adaptation of a long-popular child's toy familiar to most of us—the slingshot—may soon be in use as a jet aircraft catapult.

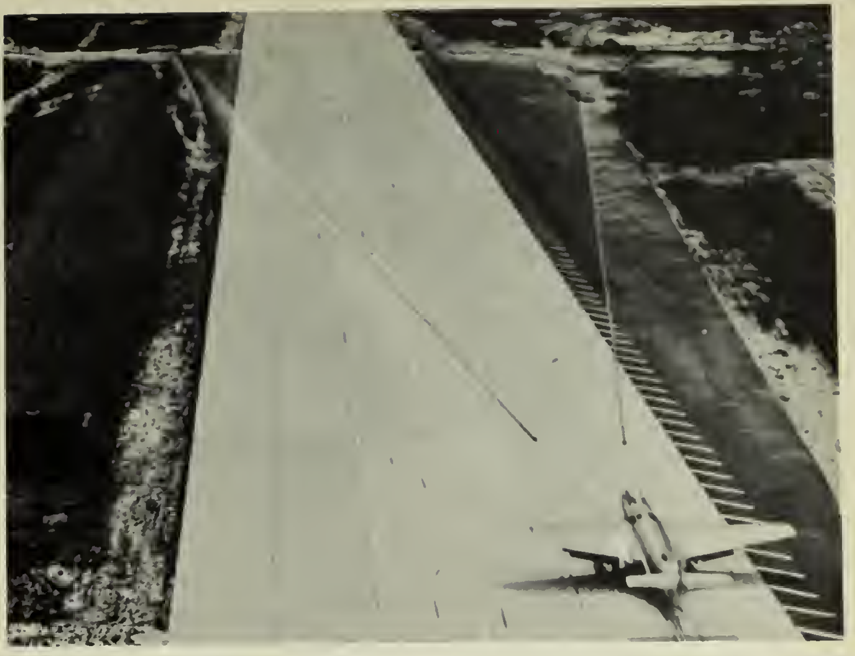
The new-style catapult, known as the RE-1, is currently being put through evaluation testing at the Naval Air Test Facility, NAS Lakehurst, N. J. Its slingshot technique, designed mainly for Marine Corps use, is expected to provide a means of launching high-performance jet planes at advance bases where runways may be crude, limited in length, or even non-existent.

RE-1 is an "assisted take-off" catapult which supplies 50 per cent of the energy required for launch, with the aircraft contributing the other 50 per cent. Thus it differs radically from the steam-driven catapults used aboard aircraft carriers, which provide approximately 95 per cent of the energy required.

Because the RE-1's use will be limited, in most cases, to just such situations as those outlined above, its design is simplicity itself. Its main components are: A shuttle and a 1000-foot shuttle track; a T-34 turboshaft engine; a nylon tape; a holdback unit; a retraction system and a control console.

Here's how it works. Before a launch, the plane's nose wheel is placed on the shuttle and secured to the shuttle by a bridle. A wire rope pendant which goes through the shuttle is attached at both ends to the nylon tape, which is in turn connected to a reel on the engine.

To launch the plane, the engine is started, and the aircraft's engine is run up to full RPM. As the clutch on the RE-1's engine is engaged, the tapes are pulled on the reels, thus exerting a force on the shuttle. At a predetermined force level, the holdback unit fails, and the released plane is hurled down the track. The shuttle and tape come to a halt at the end of the 1000-foot power stroke, and the aircraft, accelerated to flying speed, is airborne without great difficulty.



TOW GO — An A4D-2 *Skyhawk* is 'slingshotted' into air by new type catapult being tested at Naval Air Test Facility, Lakehurst, N. J.

Vietnam Crew Learns Ropes

A South Vietnam navy crew of four officers and 50 enlisted men recently spent an intensive two weeks in Subic Bay learning the ropes aboard a medium landing ship which was later turned over to South Vietnam by the United States under the Military Assistance Program.

A U. S. Navy 17-man mobile training crew spent the first four days alongside Subic Bay piers checking out the Vietnamese on how to operate the equipment on board the ship, as well as how to operate and read U. S. navigation equipment and various types of communications devices.

After a thorough check-out, the ship went to sea manned by the Vietnamese crew. Normal shipboard procedures were practiced during the first days at sea, with the exception of firing the twin 40 and 20mm gun mounts aboard the ship. The final days consisted of more on-the-job training and firing the armament.

When the ship was turned over to Vietnam, it was completely fitted out with battle dress, medical and administrative supplies and ammunition—everything needed to run a ship efficiently was on board.

Reserve Ship and Crew Earns Pat on Back

Reservists released from active duty after serving under last fall's emergency activation program have received a hearty well done for their efforts. Pats on the back have been issued by many U. S. and foreign officials, and, in many cases, the men with whom the Reservists worked added their own special thanks.

This message, for example, was received by USS *Charles E. Brannon* (DE 446) before she departed the Far East for deactivation in Seattle, Wash. It was addressed to the CO.

"After the time we have been together for training, you have shown to us a very good friendship. On the training, on the repairing of my gyro compass and radio. Your personnel has helped us with their finest will. It has testified very clear and friendness.

"Before you leave my country, we have nothing but only the thanks of our ship Lima 8 *to you and your men. The best wishes for your getting underway, the good health of all.*

"Maybe we don't meet you again, we don't hope so, but remember sir there was a Vietnam ship, you had made a exercise with them, they don't forget Brannon. *I hope our friendship will be still for ever.*

"Good bye Sir, and your men,

"LT Vu Trong Do, CO, South Vietnam Ship, HQ 328."

THE BULLETIN BOARD

Here's How 12-Month Extension of Enlistments Affects You

On 24 Oct 1962, the Department on the Navy was instructed to extend for 12 months the enlistments, appointments and periods of active duty and obligated service of all naval personnel who were to be released before 28 Feb 1963. This has been done.

The primary reason, of course, is the U. S. quarantine on arms shipments to Cuba.

This means that if you were due to be released from active duty, or discharged, between 24 Oct 1962 and 28 Feb 1963, forget it. Your enlistment is involuntarily extended for 12 months, unless you voluntarily extend or reenlist for 12 months or more under the normal procedures.

If you have already received, or do receive, authorization for transfer to the Fleet Reserve before 28 Feb 1963, the transfer is automatically deferred for 12 months.

There are, however, exceptions.

If you're an officer, the extension order does not apply to you if you are:

- To be retired under statutory retirement laws.
- Involuntarily released from active duty.
- A Reservist on active duty for training or temporary active duty.
- Already retired, and on active duty.

If you're an enlisted man or woman, the order does not affect you if you are in one of the following categories:

- Reservist, on active duty for training.
- Reservist, or Fleet Reservist, on temporary active duty.
- You have completed more than 30 years of active service, or have already been authorized to retire after 30 years of service.
- You are involuntarily released from active duty.

Otherwise, voluntary retirements, resignations, releases from active duty, and reversions to previous grades for retirement purposes are being considered only on an individual hardship basis. If you have a legitimate case for a humanitarian or hardship release, it will be acted upon.

Personnel involuntarily extended under the order will not be entitled to additional pay in the form of reenlistment bonus, lump-sum leave payment or mileage payment.

Physical examinations for involuntary extendees are not required.

The normal Seavey-Shorvey transfer procedures remain in effect.

The authority upon which the extension order was based is Public Law 87-736, a three-paragraph, joint resolution of Congress, approved on 3 Oct 1962.

This resolution gives the President the authority to call up 150,000 Ready Reservists of all services before 28 Feb 1963 to serve on active duty for up to 12 months. Reservists called up last year for the Berlin crisis are excluded.

Public Law 87-736 further provided that until 28 Feb 1963 the President could authorize the Secretary of Defense to extend, for up to 12 months, the enlistments, appointments, periods of active duty, periods of obligated service or other military status of personnel in any component of an armed force.

All-Navy Cartoon Contest
S. R. Moore, JO2, USN

"We're gonna need a lil' shorin' abaft that port bicuspid on the O1 level."

Why this special authority for a President who already had the power to declare a national emergency, under which he could call up as many as a million men?

Public Law 87-736 is simply an added option afforded the President by Congress. The resolution was judged necessary for two good reasons:

- It permitted quick response to a crisis without declaring a national emergency. Declaration of national emergency, however justified it might be, could have many unfavorable side effects. Tension would be increased not only in the United States, but throughout the world.
- The resolution permits the extension of the active-duty enlistments of men in all services. Under existing laws, declaring a national emergency does not bring with it the authority to extend the tours of Army and Air Force personnel.

As this report is being compiled, the extension of Army and Air Force tours had not yet been required. But, should it be necessary, the President and the Secretary of Defense, under the provisions of Public Law 87-736, have the authority to extend the active-duty tours of short-timers of all services.

On 7 Sep 1962, the date the President asked Congress to give him the new authority, no specific problems warranted immediate new military preparedness of the scope requested. But Congress was preparing to adjourn. The request was based on general military precaution.

The way things turned out, the President might have had to declare a national emergency if the special Congressional action had not been taken.

All this is not without precedent. In many respects, PL 87-736 is similar to the resolution Congress passed last year during the Berlin crisis. Then, a large number of Reservists were called to active duty, and a number of active-duty personnel were involuntarily extended.

The extension order was announced Fleetwide on 24 October in the form of Alnav 39. The directive which spells out exceptions to the order was released the following day as NavAct 16. Some of the more detailed administrative points followed a few hours later in NavAct 17.

TARs and Some Reservists Eligible to Enlist in USN

Many TAR billets are being transferred to the Regular Navy and the TARs, as well as other active duty Reservists, are being permitted to enlist in the Regular Navy.

In the future, the only TARs remaining on active duty will be those under the cognizance of the Chief of Naval Air Reserve Training and men in YN, PN, DK and SK billets under district commandants.

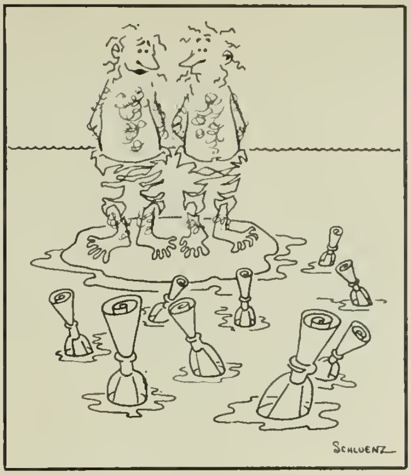
To be eligible for transfer into the Regular Navy, the man must be qualified in his rate and must have served on active duty in the Navy for 12 months before he enlists in the Regular Navy.

He must also be a citizen of the United States or an immigrant alien who can present proof of his declaration of intent to become a United States citizen.

He must be under 40 and be able to complete 20 years of active duty before he is 51 years old.

Men who first enlisted in the Naval Reserve after 9 Aug 1955, and who are thus obligated for two years of active duty, may enlist only for six years if they enlist before they serve 21 months.

Other Reservists can enlist in the Regular Navy for either four or six years. Reenlistees will be accepted in the Regular Navy at the same pay grade and rating held as Reserves.



I've just sent out this year's Christmas cards.

A TAR serving in a YN, PN, DK or SK rating under a district commandant can reenlist in the Naval Reserve or extend his Reserve enlistment and be retained as a TAR.

He also has the choice of enlisting in the Regular Navy at the same rate he held as a Reserve, provided he does so within 24 hours after his Reserve enlistment expires.

The CNARESTRA TARs have a choice of enlisting in the Regular Navy after they complete their obligated service provided they are in one of the following open ratings: QM2, QM3, RD1, RD2, RD3, SO1, SO2, SO3, MTC, MT1, MT2, MT3, TM3, FT1, FT2, FT3, GMTC, GMT1, GMT2, GMT3, ETC, ET1, ET2, ET3, DSC, DS1, DS2, DS3, RM1, RM2, RM3, CT2, CT3, MU3, MM1, MM2, MM3, MR2, MR3, BT3, BR1, EM1, EM2, EM3, IC1, IC2, IC3, CE3, BU3, SW3, ADJ1, ADJ2, ADJ3, ADR3, AT1, AT2, AT3, AO2, AO3, AQ1, AQ2, AQ3, AE3, PR2, PR3, PH3, PT2, PT3, AN, AA, AR, SN, SA, SR, FN, FA, FR, CN, CP, CR, TN, TA and TR.

Majority of STARs Choose To Ship Over For Six

For those who have wondered how successful the STAR program has been in terms of reenlistments, here are some figures which cover from September 1960, when the program began, to 30 Jun 1962.

Number who reenlisted for six years	9723
Number who reenlisted for four years	819
Over-all STAR reenlistments	10,542

Ninety-two per cent of total reenlistments were for six years.

Petty Officer/Striker Reenlistments	
In critical ratings	5921
In other ratings	1643
Total of petty officer/striker reenlistments	7564
Non petty officer reenlistments	2978

Breaking the figures down, the totals for fiscal year 1962 look like this:

Six year enlistments	4986
Four year enlistments	656
Total STAR reenlistments	5642

Eighty-eight per cent of enlistments during FY 1962 were for six years.

Petty Officer/Striker Reenlistments (FY 1962)	
In critical ratings	3159
In other ratings	899
Total of petty officer/striker reenlistments	4058
Non petty officer reenlistments	1584

STAR reenlistees average 2.6 years of active service on reenlistment.

DECK THE HULLS with Yuletide spirit . . . share this issue of ALL HANDS with nine shipmates.

Officers Should Report Changes In Language Ability and Advancement in Education

If you're an active duty naval officer, the Navy wants to hear from you when, through voluntary off-duty study, a change occurs in your educational level, degrees earned or foreign language proficiency.

BuPers Inst. 1520.83A asks you to submit a letter report to the Chief of Naval Personnel (Pers 1923) when you:

- Acquire an additional degree, or acquire additional education which raises your educational level. The report should list the major field of study, and the specialty within the major, when applicable.
- Attain proficiency in a new language, reach a higher level of proficiency in any language or become aware of a loss of proficiency. The language or dialect concerned should be listed in each case.

An academic transcript should be submitted as an enclosure to this report in all cases except those in which language proficiency has been gained through other than a formal course of study. You need not report education completed as a result of orders to duty under instruction.

Inactive officers will continue to report education and language information on the Annual Qualifications Questionnaire (Inactive Reserve, NavPers 319), and submit transcripts to the Chief of Naval Personnel (Pers-E221).

In submitting your report, you should use the educational level codes and/or foreign language proficiency codes listed in BuPers Inst. 1520.83A.

EDUCATIONAL LEVEL

Code	*Abbreviation*	*Definition*
0	LS THN HS	Did not graduate from high school.
1	HS	High school graduate, or GED equivalent.
2	LS2YR COL	Less than two years of college credit, or college level GED test.
3	2YRS COL	Two years of college credit, but less than three years, or 2CX test.
4	3YRS COL	Three or more years of undergraduate college credit but no bachelor's degree awarded, or a degree from a non-accredited school.
5	PG NO DGR	Significant postgraduate study, no degree granted and no *prior bachelor's* degree; including: (a) Certificate of completion from a Navy-sponsored postgraduate course. (b) Satisfactory completion of one or more years of a Navy-sponsored PG course without completion of the course. (c) Completion of a specialized medical service or nursing program which does not lead to a degree, including anesthetics, dietetics, sanitary science and occupational or physical therapy. (d) Completion of at least 18 semester hours of graduate credit without receiving a master's degree. (e) Completion of education required for commission in the Chaplain Corps without receiving any bachelor's degree.
6	BACHELOR	Bachelor's degree
7	POSTGRAD	Significant postgraduate study, no additional degree granted; officer has prior bachelor's degree in any subject; including: (a) Any of the circumstances described under (a), (b), (c) or (d) in the definition of code 5, PG NO DGR above. (b) Completion of education required for commission in the Chaplain Corps with a bachelor's degree for pre-theological education but no degree for theological education.
8	MASTER	Master's or professional engineer degree.
9	DOCTOR	Doctor's degree.

Foreign Language Proficiency

Code	*Definition*	
	Spoken Ability	*Written Ability*
L (Linguist)	Fluent,	*and* can translate competently into the language from English.
I (Interpreter)	Fluent, or can converse, and serve as interpreter,	*and* can read simple texts, or translate into or from English.
T (Translator)	May be able to use routine expressions,	*and* can translate competently from the language into English, may be able to translate into the language from English.
X (Some knowledge)	Can use routine expressions	*and/or* read simple texts.

Note: In order to report "some knowledge" proficiency in French, German or Spanish, you must possess the ability to speak *and* read the language. For all other languages, *either* ability is sufficient.

Specific levels of educational achievement and language proficiency, as revealed by these codes, are used to standardize reporting and recording procedures. They are the same as those reflected on the Officers Data Card, NavPers 2626. Reports submitted in accordance with this instruction should specify the level which you believe to be justified in your case.

It should be noted that education is recorded at the level indicated by the number of credits accepted by and/or completed at each institution. Therefore, in order that education completed at more than one institution be counted in a cumulative manner in establishing the final educational level, it is necessary that the transcript from last school attended show acceptance of prior credits.

What makes you think it rains here a lot?

Quarters Allowances Increased, Navy Allotment Rules Revised

TWO NEW POLICIES on subjects of high interest to all married Navymen on active duty—family and money—become effective on 1 Jan 1963. One calls for an increase in quarters allowances, which means more money for all Navy families. The other changes the family allotment requirements of most petty officers.

More BAQ

If you're an E-4 with over four years of service, or are in any higher grade, you are no longer required to have three or more dependents as basic entitlement to your grade's top quarters allowance. The new BAQ scales are set up on a flat "with dependents" and "without dependents" basis.

However, if you're an E-4 with four years' or less service, or an E-1, E-2, or E-3, your BAQ will continue to be based on the number of dependents you have.

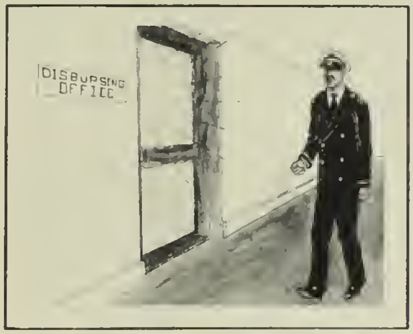
The official word on the increase in BAQ is contained in SecNav Inst. 7220.42 which was issued last September. It also spells out the BAQ entitlements of active duty Reservists and Aviation Cadets.

Revised Allotment Procedure

The new allotment policy which becomes effective on 1 Jan 1963 is also discussed in SecNav Inst. 7220.42. In general, it involves these six points:

- If you are in pay grade E-4 with over four years' service, or in any higher grade, you will no longer be required to have a monthly allotment sent to your wife as a requirement to receive basic allowance for quarters.
- Any allotments to your wife, including the basic allowance for quarters, will be automatically discontinued by the Navy Finance Center on 1 Jan 1963.
- You may, if you wish, register a "D" (dependency) allotment to your wife, in any amount you choose.
- If you do not register a "D" allotment, your BAQ and any former payments to your wife in allotment form will be automatically shifted to your regular pay.
- Other allotments (savings, insurance) will not be affected.
- Non-rated men, and men in pay grade E-4 who have four years' or less service, must continue to provide "Q" allotments to wives as a requirement for BAQ entitlement. The monthly allotment must be for an amount not less than the new applicable BAQ, plus $40.00.

All-Navy Cartoon Contest
H. L. Funston, BT2, USN



"I'll see your thousand and raise you two."

Allotment Encouraged

Even though an allotment to your wife may not be required under the new laws, you are urged to continue one as sound family financial protection. BuPers Inst. 1620.1C makes it clear the Navy will not be a haven for individuals who attempt to evade their family responsibilities.

All Navymen are expected to conduct their personal affairs satisfactorily. This means that adequate and continuous financial support must be provided for all dependents.

An allotment to your wife in an amount as great, or greater than, the amount she received under the "Q" allotment laws, may be the financial protection it takes to avoid trouble.

Failure to fulfill family financial obligations could mean disciplinary proceedings which would result in your separation from the service—under conditions that would not be considered fully honorable.

Commanding officers have been instructed to consult BuPers Inst. 1620.1C as a reference in handling all doubtful support cases. The directive contains a complete description on the Navy's policy for handling disputed support cases.

Before and After Table Shows Increase in BAQ

Here's a roundup of revised monthly BAQ rates which become effective on 1 Jan 1963. Corresponding figures in parentheses represent BAQ amounts before the increase

Grade	Without Dependents	Increase of:	With Dependents	Increase of:
O-10	$160.20 (136.80)	$23.40	$201.00 (171.00)	$30.00
O-9	160.20 (136.80)	23.40	201.00 (171.00)	30.00
O-8	160.20 (136.80)	23.40	201.00 (171.00)	30.00
O-7	160.20 (136.80)	23.40	201.00 (171.00)	30.00
O-6	140.10 (119.70)	20.40	170.10 (136.80)	33.30
O-5	130.20 (102.60)	27.60	157.50 (136.80)	20.70
O-4	120.00 (94.20)	25.80	145.05 (119.70)	25.35
O-3	105.00 (85.50)	19.50	130.05 (102.60)	27.45
O-2	95.10 (77.10)	18.00	120.00 (94.20)	25.80
O-1	85.20 (68.40)	16.80	110.10 (85.50)	24.60
W-4	$120.00 (94.20)	$25.80	$145.05 (119.70)	$25.35
W-3	105.00 (85.50)	19.50	130.05 (102.60)	27.45
W-2	95.10 (77.10)	18.00	120.00 (94.20)	25.80
W-1	85.20 (68.40)	16.80	110.10 (85.50)	24.60
E-9	$ 85.20 (51.30)	$33.90	$120.00 (Formerly 77.10 for one or two dependents; 96.90 for more.)	$42.90 or 23 10
E-8	85.20 (51.30)	33.90	120.00	42.90 or 23.10
E-7	75.00 (51.30)	23.70	114.90	37.80 or 18.00
E-6	70.20 (51.30)	18.90	110.10	33.00 or 13.20
E-5	70.20 (51.30)	18.90	105.00	27.90 or 8.10
*E-4	70.20 (51.30)	18.90	105.00	27.90 or 8.10
**E-4	55.20 (51.30)	3.90	Under the new BAQ scales, an E-4 with one or two dependents receives 83.10 which denotes an increase of 6.00. All E-1 through E-3 with one dependent receive 55.20 for an increase of 3.90. All E-1 through E-4 with two dependents receive 83.10, an increase of 6.00. All E-1 through E-4 with three or more dependents receive 105.00, an increase of 8.10.	
E-3	55.20 (51.30)	3.90		
E-2	55.20 (51.30)	3.90		
E-1	55.20 (51.30)	3.90		

* More than four years' service.
** Four years' service or less.

Opportunity Knocks for Commissions in Medical Service Corps

QUALIFIED Navymen (and women) will have a chance next May to obtain temporary or permanent commissions in the Navy Medical Service Corps.

The Navy, however, intends to be satisfied, by means of considerable documentation and testing, that the applicants are professionally qualified and fit to be officers.

Interested applicants will have to satisfy numerous qualifications and pass two sets of examinations.

Here are the general requirements for eligibility under the program:

- Applicants must be United States citizens.
- They must meet physical standards contained in the *Manual of the Medical Department*. Women must meet dependency requirements stated in Article C-1102(2) of the *BuPers Manual*.
- Applicants can have had no court-martial convictions during the two-year period before they take their written professional examination.

Enlisted Navymen who have satisfied these requirements will be given an Officer Selection Battery Test which will indicate their general aptitude and military knowledge and their proficiency in English, mathematics, science, history and social studies.

The test will be administered at the applicants' station on 8 Jan 1963. The Chief, Bureau of Medicine and Surgery, will establish a cutoff score after 1 Mar 1963. Only those above the line will be eligible to participate in the professional examination which will be given on 1 May 1963.

Several fields are open to applicants. They are supply and administration, optometry, pharmacy, and medical allied sciences. Each has its own specific requirements.

Those who want to try for an ensign's commission in supply and administration must meet the general requirements and, in addition, must have the following qualifications:

- Applicants must be serving as Medical or Dental Service warrant or chief warrant officers or as chief or first class hospital corpsmen or dental technicians at the time of their application. An applicant must also have served as a petty officer or higher for at least one year before 1 May 1963.
- To receive a permanent appointment, applicants must be at least 21 years old and less than 32 years old when they are appointed. Temporary appointments will be given to men who have not reached their 35th birthday by 1 July of the year in which they are appointed.
- Applicants must have successfully completed 30 semester hours of work in an accredited college or university. Applicants who are otherwise qualified but lack the 30 hours of college credits, may substitute a service-accepted equivalent of the college work, or be high school graduates and have a GCT or ARI score of 60 or above.

Regular Navymen and Reserves on active duty are eligible for the optometry, pharmacy and medical allied sciences sections.

The specific requirements for Navymen interested are as follows:

- Applicants must be at least 21 and under 32 years of age when they are appointed.
- Those appointed to the grade of ensign in the pharmacy section must have a bachelor's degree from an accredited college or university, with a major in pharmacy. The applicant must also be registered as a pharmacist in one of the United States or the District of Columbia.
- Optometrists must have a bachelor's degree with a major in optometry. The applicant must also be registered as an optometrist in one of the 50 states or the District of Columbia.
- Those interested in the medical allied sciences section must have a bachelor's degree with a major in one of the following fields: bacteriology, biochemistry, biophysics, chemistry, entomology, hematology, industrial hygiene, microbiology, parasitology, pharmacology, physiology, physics, public health, radiobiology, radiochemistry, radiophysics or virology.

All-Navy Cartoon Contest
W. R. Maul, CT1, USN

"Where to, Chief?"

There will be a limited number of Regular Navy chiefs and first class hospital corpsmen who meet all other requirements for participation in the medical allied science section professional examination but who do not have a degree.

They will be considered eligible to take the professional exam if they:

- Have shown superior performance in their assignments and have demonstrated outstanding aptitude for advanced training.
- Have proof of at least 30 hours of college work to their credit.

The Bureau of Medicine and Surgery intends to sponsor a training program to augment the college work of these applicants, thereby providing a professionally acceptable educational background for those who have less than a bachelor's degree in their specialty.

Navymen who have not been eliminated up to this point are now ready to take the professional examination in their specialty.

Candidates for commissions in the supply and administration section will be tested on their knowledge of all fields related to medical department administration.

The test will include general Navy organization and administration, including personnel, records, finance, supply and food service.

Those who aspire to be ensigns in the pharmacy section will be examined on general inorganic, organic and pharmaceutical chemistry, materia medica, toxicology, principles of pharmacy, incompatibilities, dispensing and the history and literature of pharmacy.

Prospective optometrist ensigns must be familiar with ocular anatomy and pathology, theoretic optometry, practical optics, visual fields, physiology and orthoptic treatment and procedures.

Those interested in the medical allied sciences section will get a basic general examination which will include experimental design in the candidates' specialty.

Most of the applicants who successfully complete these examinations will be appointed by the President to the grade of ensign, although it is possible to receive an appointment to the grade of lieutenant junior grade.

To be eligible for an appointment to LTJG, the applicant must have a doctor's degree (philosophy or science) in optometry, pharmacy or the listed allied sciences.

All applications for participation in this program must have the forwarding endorsement of the applicant's commanding officer.

Complete details concerning Medical Service Corps officer procurement programs, including suggested study material and required documentation, can be found in BuPers Inst. 1120.15E.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 35—Announced the convention of the Congressional Medal of Honor Society in Detroit, Mich., 25-27 October.

No. 36—Announced approval by the President of the report of a selection board which recommended line officers for temporary promotion to the grade of commander.

No. 37—Announced extension for two years of the law which provided for free importation of personal and household effects of personnel in the service of the United States.

No. 38—Announced approval by the President of reports of selection boards which recommended active duty officers of the Medical Corps and Supply Corps for promotion to captain and to commander.

No. 39—Announced authorization by the Secretary of Defense for the Navy to extend enlistments, appointments, periods of active duty and periods of obligated service.

No. 40—Announced security guidance pertaining to the dissemination of information by military and civilian personnel in the Department of Defense.

No. 41—Stated that, until further notice, urgent purchases in direct support of operations resulting from the Cuban situation are exempted from approval requirements of certain directives.

Instructions

No. 1211.3A—Discusses the identification of officer postgraduate billet requirements.

No. 1620.1C—Announces the policy concerning support of dependents and related matters, and emphasizes command responsibility for leadership and counseling concerning the change in the "Q" allotment program.

No. 1910.11E—Directs the early elimination of enlisted personnel who lack potential for a Navy career and are considered to be a command burden by reason of poor performance and/or conduct.

No. 6100.2A—Reemphasizes the responsibility of commanding officers for maintaining the level of physical fitness among their personnel.

Notices

No. 1120 (27 September)—Announced the selection of personnel recommended for appointment to the grade of ensign, Medical Service Corps, USN.

No. 1530 (2 October)—Announced the selection of Navy and Marine Corps personnel for assignment to the Naval Preparatory School, Bainbridge, Md., as candidates for appointment to the U. S. Naval Academy.

No. 1500 (5 October)—Clarified Scuba requirements for divers second class and above, and alerts commands to forthcoming changes to the Navy Enlisted Classification codes as related to divers.

No. 19 (17 October)—Authorized the early separation of enlisted personnel who became eligible for separation during the Christmas-New Year holiday period. (Superseded by Alnav 39.)

No. 1440 (25 October)—Reemphasized the Selective Training and Retention program (STAR) and the Selective Conversion and Retention program (SCORE).

QUIZ AWEIGH

There was a day when a destroyer was a DD and that was the end of it. In today's Navy, however, we have a family. Are you keeping abreast of our destroyer Navy?

1. Escort ships have always played a major role in the U.S. Navy's wartime activities. Currently being built is a DEG. It is a: (a) Guided missile escort ship; (b) guided missile destroyer escort; (c) nuclear powered destroyer.

2. Guided missiles and nuclear power are being teamed up on many ships in the United States Navy. Destroyer types have theirs in the DLGN which was placed in commission last summer. It is: (a) The nuclear powered guided missile frigate *Bainbridge*; (b) nuclear powered destroyer leader *Bainbridge*; (c) guided missile destroyer *Biddle*.

3. Destroyers have grown considerably in recent years. It has been said that they have now become capital ships. For example, the standard displacement of the light cruiser USS *Juneau* (CLAA 53) was 6000 tons. In comparison, the standard displacement of USS *Norfolk* (DL 1) is: (a) 4600 tons; (b) 5600 tons; (c) 6600 tons.

4. The complement of destroyer types has also grown. The *Fletcher* class destroyer of World War II fame, for example, carried a wartime crew of 353 men. The wartime crew of USS *Norfolk*, however, is: (a) 500; (b) 550; (c) 600.

5. Destroyers of the *Forrest Sherman* (DD 931) class are equipped with three 5-inch/54 gun mounts. These are single-gun mounts, whereas many earlier destroyers carried 5-inch/38 twin-gun mounts. The single-gun 5-inch/54 mount, compared to the twin 5-inch/38 mount, fires: (a) More rounds per minute than both guns of the twin mount; (b) fewer rounds than both guns of the twin mount; (c) one and one half times as many rounds as one of the guns of the twin mounts.

(Answers are on page 55.)

Here's What BuMed Reports on the Subject of Colorblindness

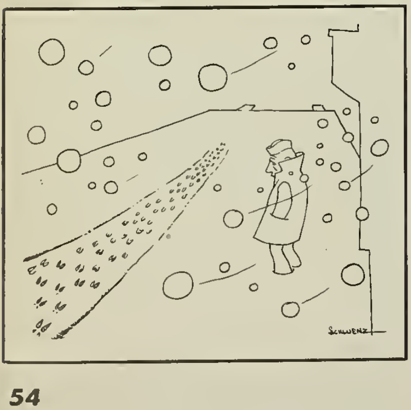
If you're the one Navyman out of every 25 who has defective color perception, better known as "colorblindness," here's a nutshell description of the nature and consequences of your ailment, as seen by the Bureau of Medicine and Surgery. No other physical ailment, says BuMed, is as widely misunderstood as defective color perception.

First, there's a matter of definition. The word "colorblind" is commonly used as an informal, easily understood way of saying color perception defect. The word, however, is a misnomer. It implies you are unable to see colors, which, insists BuMed, is not true. You do, in fact, see colors, but you tend to confuse certain pairs of colors.

Color perception defects are usually categorized into four grades of severity. These are: Mild, mild to moderate, moderate to severe and severe.

There are three types of color defective men who have some kind of color discrimination. The first type is termed a "Protan" (which simply means type one, and is often called "red blind"). To him the color red appears as some shade of gray. The second type is the "Deutan" or so-called "green blind." He perceives green as some shade of gray. The third type is the "Tritan" or "yellow-blue" blind. The latter are quite rare.

Approximately two per cent of the entire male population of the United States have severe color perception defects. However, diagnosis can be made only by using an expensive and highly technical piece of equipment known as the anomaloscope. Only a few medical facilities in the U.S. are equipped to conduct a thorough, complete, color perception examination. One of these is the Naval Medical Research Laboratory at the Submarine Base, New London, Conn.



The administrative difficulties and high cost of anomaloscopic equipment prohibit distribution on a Navy-wide basis. Therefore, the Navy must rely on less expensive, less complicated devices for detecting color perception defects.

The most common Navy test—the Farnsworth Lantern—permits men with mild color perception defects to pass with flying colors. Only six per cent of the U.S. male population will fail the Farnsworth Lantern, while 10 per cent will fail more critical examinations.

Men who can pass the Farnsworth Lantern are considered capable of performing all Navy duties.

Normal color perception is mandatory in certain rates, such as electronics technician, interior communications technician and hospital corpsman (laboratory technician).

But the importance of near-normal color perception in the performance of Navy duties goes far beyond any specific task. All daylight vision is color vision. Men who have defective color perception have difficulties with all types of daylight vision.

What's more, color coding is used to some extent in almost every Navy job. A few examples are pipes, munitions, flags, wires and lights. Color is the easiest and most convenient device to use in coding.

Hospital corpsmen need extra-sharp eyes. Many laboratory tests depend upon color changes, or changes in the intensity of any given color. Nearly all materials examined under a microscope are stained with dyes.

A ship's cook with a severe color perception defect would be unable to distinguish green tomatoes from ripe ones. He could probably distinguish mustard from catsup, but would have difficulty distinguishing mustard from Worcestershire sauce if they were stored in the same kind of bottles.

Men with severe color perception defects may accumulate more traffic tickets than those who see colors normally, even though most designers, including the designers of traffic lights, usually reinforce color clues with other clues.

In most U. S. cities the green traffic light (bottom) is always brighter than the red one on top. Men with severe color perception defects can distinguish between colors on the basis of the intensity of color saturation of the object viewed. The color-defective driver learns by experience that the brighter light is the green one.

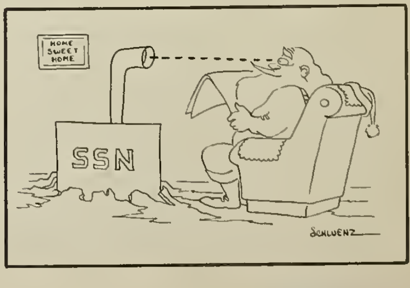
Perhaps the greatest misunderstanding on the subject of color perception requirements for Navy duty concerns the submarine service. Recruiters are frequently asked about the "strict" color perception requirements for submarine duty.

Near-normal color perception (passing the Farnsworth Lantern) is required for sub service, but not, as many men believe, because of "Christmas Tree" display lights. As you've already seen, passing a Farnsworth Lantern test is usually required for any Navy job, submarine or otherwise. Men who have severe color perception defects (two-color vision)—are military liabilities. There are few Navy jobs they can perform in a satisfactory manner.

Even with near-normal color perception, certain problems are occasionally encountered. The quality of the light under which the Navyman works may have considerable bearing on his ability to distinguish between colors.

An ET with a color perception defect not serious enough to bar him from service may perform very well in a test in which he is asked to distinguish between new wires of several different colors at a bench lighted by a brilliant fluorescent light.

The same ET could have some trouble, however, when faced with the task of sorting out a collection of faded wires in a dark compartment with a tired old Navy flashlight as his only assistant.



List of New Motion Pictures And TV Series Available To Ships and Overseas Bases

The latest list of 16-mm feature movies and TV series available from the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Two one-hour TV shows are packaged together for a 108-minute program, but may be shown only aboard ship. TV series available for selection are: The Dick Powell Show, The Detectives, and Target—The Corruptors—Melodramas; and Rawhide—Western.

Movies in color are designated by (C) and those in wide-screen processes by (WS). They are available for ships and bases overseas.

Motion Pictures

Two Weeks in Another Town (2102) (C) (WS): Drama; Kirk Douglas, Edward G. Robinson.

My Geisha (2103) (C) (WS): Comedy Drama; Shirley MacLaine, Yves Montand.

Payroll (2104): Drama; Michael Craig, Francoise Prevost.

Three Stooges in Orbit (2105): Comedy; Three Stooges, Carol Christensen.

Adventures of a Young Man (2106) (C) (WS): Drama; Richard Beymer, Diane Baker.

I Like Money (2107) (C) (WS): Drama; Peter Sellers, Nadia Gray.

Wild Westerners (2108): Western; James Philbrook, Nancy Kovack.

Kid Galahad (2109) (C): Drama; Elvis Presley, Lola Albright.

Tarzan Goes to India (2110) (C) (WS): Melodrama; Jock Mahoney, Leo Gordon.

The Spiral Road (2111) (C): Drama; Rock Hudson, Gema Rowlands.

Carry on Teacher (2112): Comedy; Kenneth Connor, Leslie Phillips.

The Phantom of the Opera (2113) (C): Melodrama; Herbert Lom, Heather Sears.

Five Weeks in a Balloon (2114) (C) (WS): Melodrama; Red Buttons, Fabian.

Ring-A-Ding Rhythm (2115): Musical; Chubby Checker, Gary Bonds.

Air Patrol (2116): Drama; Willard Parker, Merry Anders.

Village of Daughters (2117): Comedy; Eric Sykes, Scilla Gabel.

The Pigeon that Took Rome (2118) (WS): Comedy; Charlton Heston, Elsa Martinelli.

Guns of Darkness (2119): Drama; David Niven, Leslie Caron.

Big Red (2120) (C): Drama; Walter Pidgeon, Gilles Payant.

Bon Voyage (2121) (C): Comedy; Fred MacMurray, Jane Wyman.

Television Programs

5288: TV-1 *The Dick Powell Show*—A Time to Die. TV-2 *The Detectives*—Saturday Edition.

5289: TV-1 *The Dick Powell Show*—A Swiss Affair. TV-2 *The Detectives*—Three Blind Mice.

5290: TV-1 *The Dick Powell Show*—No Strings Attached. TV-2 *The Detectives*—Barrel Full of Monkeys.

5291: TV-1 *The Dick Powell Show*—Boston Terrier. TV-2 *The Detectives*—Pandora's Box.

5292: TV-1 *The Dick Powell Show*—Doyle Against the House. TV-2 *The Detectives*—One Lucky Break.

5293: TV-1 *The Dick Powell Show*—The Prison. TV-2 *The Detectives*—Walls Have Eyes.

5294: TV-1 *Rawhide*—Incident Near the Promised Land. TV-2 *The Dick Powell Show*—The Hook.

5295: TV-1 *The Dick Powell Show*—Obituary for Mr. X. TV-2 *The Detectives*—Finders Keepers.

5296: TV-1 *The Dick Powell Show*—Killer in the House. TV-2 *The Detectives*—Jagged Edge.

5297: TV-1 *Target—The Corruptors*—The Invisible Government. TV-2 *The Detectives*—Escort.

5298: TV-1 *Target—The Corruptors*—Golden Carpet. TV-2 *The Detectives*—Point of No Return.

5299: TV-1 *Target—The Corruptors*—Journey into Morning. TV-2 *The Detectives*—One Lousy Wednesday.

5300: TV-1 *Target—The Corruptors*—Babes in Wall Street. TV-2 *The Detectives*—Night Boat.

QUIZ AWEIGH ANSWERS

(Quiz Aweigh Is on Page 53.)

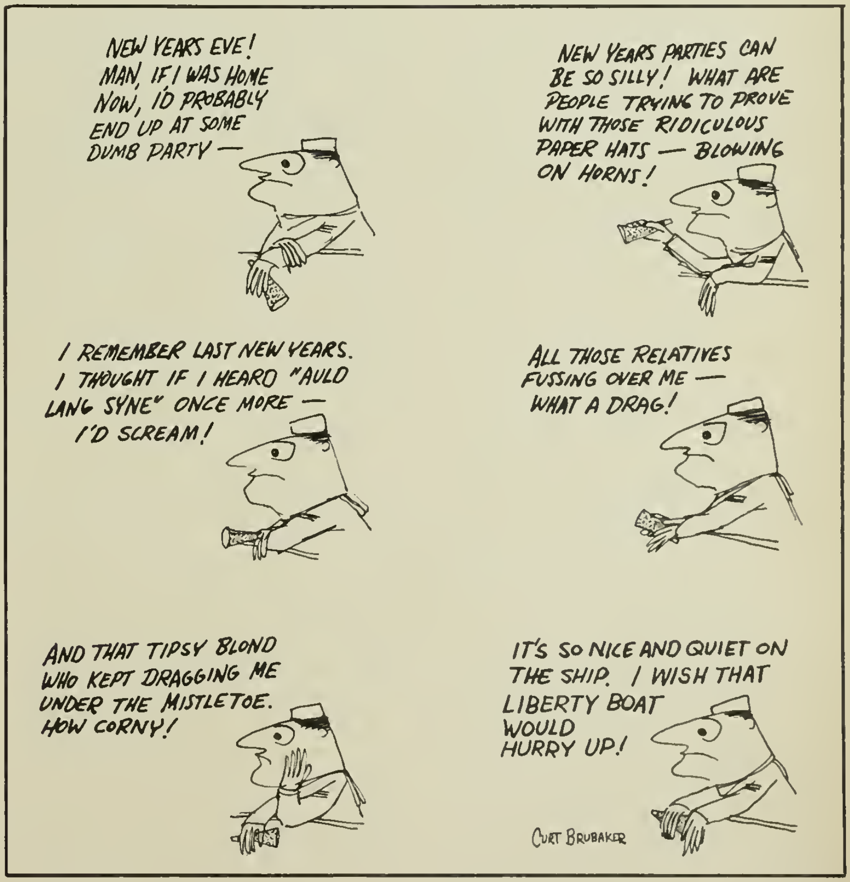
1. (a) Guided missile escort ship.

2. (a) Nuclear powered guided missile frigate Bainbridge.

3. (b) 5600.

4. (c) 600.

5. (a) More rounds per minute than both guns of the twin mount.


NEW YEARS EVE! MAN, IF I WAS HOME NOW, I'D PROBABLY END UP AT SOME DUMB PARTY —
NEW YEARS PARTIES CAN BE SO SILLY! WHAT ARE PEOPLE TRYING TO PROVE WITH THOSE RIDICULOUS PAPER HATS — BLOWING ON HORNS!
I REMEMBER LAST NEW YEARS. I THOUGHT IF I HEARD "AULD LANG SYNE" ONCE MORE — I'D SCREAM!
ALL THOSE RELATIVES FUSSING OVER ME — WHAT A DRAG!
AND THAT TIPSY BLOND WHO KEPT DRAGGING ME UNDER THE MISTLETOE. HOW CORNY!
IT'S SO NICE AND QUIET ON THE SHIP. I WISH THAT LIBERTY BOAT WOULD HURRY UP!
CURT BRUBAKER

You're Treated like a Guest on MSTS Ships

Ever since you got your orders, life has been in a turmoil. Will your family have concurrent travel? When will your household goods be picked up? Will your car accompany you? How are you going?

If the answer to the last question is MSTS, there are some advantages which you will probably enjoy. For you and your wife, it will provide a time for unwinding after the hectic and periodic Navy routine of folding one tent and setting up another.

If you have kids (and it seems that almost everyone who travels on an MSTS ship does) you can even relax with them.

Every effort is made to keep them from getting out of hand and annoying other passengers, but if the baby cries in the middle of the night, or the three-year-old announces loudly that he must depart immediately for the bathroom, nobody cares too much, because his baby might be howling or his three-year-old might commit the same faux pas within the next few hours.

For small children there is a well-equipped playroom on the ship, where there are playpens for the creepers and hobby horses and other toys for the slightly older children.

There are usually clubs formed the first day out, in which kids from three to ten are instructed not to run, not to lean over the rail, not to be too active during rough weather and not to make any more noise than they have to.

On some ships they are given badges with the implied threat that the badge will be taken away if the member becomes obstreperous and breaks the club rules which he has promised to obey.

Much of the child's time is spent watching movies. There are special kid shows, usually in the morning. In some ships, there are two daytime shows and another movie (usually two showings) in the evening for adults.

There are three high points of the MSTS day for everyone. They occur immediately after the dinner gongs are rung.

For veteran MSTS travelers, there is usually considerable comparison of the cuisine in the ship on which they are currently sailing to the cuisine of a ship in which they had formerly traveled.

Some vow that one ship has better food than another, but it's all good and one is sometimes confronted with the dilemma of choosing between two entrees, both of which set the salivary glands to working overtime.

For the time in between meals, there are cards in the lounges, refreshments at the snack bar, strolls on the deck, relaxing in a deck chair, playing shuffleboard or whatever other deck games the ship provides.

If you just want to read, there is a library which is adequately stocked with reading material, both of the paper- and hard-back variety.

After the kids are tucked in and asleep, you and your wife can enjoy the company of the other passengers without the perils of having children (somebody else's, of course) underfoot, for there is a strict curfew imposed on the very young.

The last event of the day for adults is a late evening snack then off to bed.

By the time you get to where you are going, you have usually recovered sufficiently from your last week on the beach and are ready to set up housekeeping in a new country and a new situation.

Destroyer Tenders

A destroyer tender is, logically enough, a ship that tends destroyers. As such, it often resembles a mother of a string of small boys for there are almost invariably several destroyers moored alongside waiting their turn for attention.

A destroyer can get almost anything done at these floating shipyards. The tender's versatility ranges from manufacturing tiny parts for shipboard instruments to overhauling a bull gear.

Tenders have divers for underwater work, carpenter and radio shops, and workshops for electronic repair.

They also have a supply of depth charges and ready torpedoes which they happily furnish their customers.

While the destroyers are secured alongside for repairs, the tender furnishes them with electrical power, water and steam so the destroyer's engineering plant can shut down completely.

Tenders come in several sizes. The smallest are about 465 feet long and displace approximately 14,800 tons fully loaded.

They graduate in size to the largest which are about 530 feet long and, fully loaded, displace approximately 17,176 tons.

They carry crews which vary in number from 826 to 1262 officers and enlisted men.

The noise and activity aboard are prodigious; in fact, the crew often works in shifts around the clock.

Opportunity of Lifetime For NESEP Graduate

The weapons department of USS *Little Rock* (CLG 5) has a new officer. His name is Snyder, Christian R. He is an ensign—one among many to acquire a college education and a commission through his participation in NESEP (Navy Enlisted Scientific Education Program).

To produce the scientifically trained men it needs, the Navy organized the NESEP in colleges and universities throughout the country, where selected enlisted students could obtain degrees in science and engineering.

Ensign Snyder may not be the statistically typical NESEP graduate but he is representative.

He is married and the father of three children. He joined the Navy in 1946 as a seaman recruit and worked his way through the ranks to chief petty officer.

In 1958, he decided NESEP was the educational opportunity of a lifetime for a Navyman and, this year, was awarded his BS degree in electrical engineering. He then went on to four months at the Newport, R. I., Officer Candidate School, where he was commissioned.

It wasn't easy for either Ensign Snyder or his family, for there was little respite from study during his four college years. However, the new officer in *Little Rock's* weapons department considers NESEP the best opportunity to come his way during his life in the Navy.

DECORATIONS & CITATIONS

LEGION OF MERIT

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ CLIFFORD, George M., CAPT, USN, for outstanding service from July 1960 to June 1962 as Assistant Deputy Chief of Staff, Intelligence, Headquarters North American Air Defense Command. CAPT Clifford conceived and developed many policies and procedures which contributed significantly to the successful accomplishment of the intelligence mission of the North American Air Defense Command (NORAD). His capacity for organization and management has resulted in NORAD intelligence being recognized in both Canada and the United States as an outstanding organization. Keenly aware of the aerospace threat to North America, he quickly took effective action to establish the necessary requirements to carry out the NORAD intelligence mission.

★ PARKS Joel D., RADM, SC, USN, for outstanding service as Commanding Officer, U. S. Naval Supply Center, San Diego, Calif., from August 1958 to June 1962. A pioneer and recognized expert in the field of mechanized supply management and in the application of automatic data processing systems in naval supply operations, RADM Parks has brought this concept into use in the Shop Stores System in this area, and has provided advice in its implementation in other areas, resulting in greatly improved inventory management practices at local levels, reduced inventory investment, and sustained supply effectiveness. He skillfully directed the consolidation of major supply operations under the Supply Center, including assumption of responsibility for all technical materials, thereby improving Fleet support in technical materials, better coordinating the total support to Fleet units in the area, and achieving monetary economies in the consolidation of inventories.

★ TRIEBEL, Charles O., RADM, USN, for outstanding service as Director, Logistic Plans Division, Office of the Deputy Chief of Naval Operations (Logistics) from September 1960 to August 1962. Responsible for providing logistic support to the rapidly expanding Fleet Ballistic Missile Weapon System, RADM Triebel anticipated and met the requirements for this vital new weapon system. As Chairman of a Secretary of Defense Budget Review Committee on Bases and Installations, he exercised organizational, planning, and administrative abilities of a high order, resulting in the achievement of great savings to the government without sacrificing the military posture of the Navy or incurring adverse publicity.

Gold Star in Lieu of Second Award

★ DOLAN, William A., Jr., RADM, USN, for outstanding service as Commander, Puget Sound Naval Shipyard, and Industrial Manager, Thirteenth Naval District, from June 1960 to June 1962. RADM Dolan brought the activities under his command to a high state of efficiency, resulting in the handling of a greater workload with increased economy. Through his keen foresight and sound judgment, he has been responsible for the building of ships of the highest quality, which have been delivered ahead of schedule at costs below estimates. In the establishment of the Nuclear Power Division, he saved the government over one million dollars by consolidation of space. By his dynamic leadership, analytical skill, and diplomacy, he has contributed immeasurably to the effective support and material readiness of the Operating Forces and the Reserve Fleets.

Gold Star in Lieu of Second Award

★ MCKINNEY, Eugene B., RADM, USN, for outstanding service as Commander, Military Sea Transportation Service, Pacific Area, from January 1960 to June 1962. During this period, RADM McKinney established an outstanding record as a planner and coordinator for the movement of 200,000 measurement tons of cargo per month. Although faced with a period of recurring, major, maritime strikes, he made plans in advance and skillfully coordinated these plans with representatives of industry and labor, thereby preventing a disruption in the flow of essential supplies to our forces in the Pacific area. Through his sound judgment, keen foresight, and thorough understanding of the needs of the Military Sea Transportation Service, he was instrumental in the maintenance of a high state of readiness of government-owned ships, an outstanding safety record, and a constantly improving utilization of facilities.

NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ HAGEMAN, Joseph W. AD3, USNR, for heroic conduct in effecting the rescue of the co-pilot of a U. S. Navy helicopter which crashed and burned in a wooded area near Medford, N. J., on 15 Aug 1960, killing the pilot upon impact. Occupying a rear passenger seat in the helicopter, Hageman managed to free himself from the wreckage and, although in a dazed condition, re-entered the helicopter with another passenger to remove the helpless co-pilot to safety. Moments later, the aircraft was consumed by intense fire. By his selfless efforts, Hageman risked his own life to save that of another.

★ HERBERT, Frank R., LT. USN, for heroic conduct during the hours of darkness on the early morning of 18 Feb 1962, while serving on board USS *Taluga* (AO 62), en route to rendezvous with units of the Seventh Fleet. When two crew members were swept overboard from *Taluga* by an unusually large wave, LT Herbert unhesitatingly dived into the rough waters, swam a distance of approximately 40 yards to the victims, and succeeded in bringing them to the ship's side, where heavy seas washed them away before they could be brought on board. When the men were again sighted, LT Herbert once more entered the water and brought them alongside the ship where all were lifted to safety.

★ THORNTON, John W., CDR, USNR, for heroic conduct in effecting the rescue of the co-pilot of a U. S. Navy helicopter which crashed and burned in a wooded area near Medford, N. J., on 15 Aug 1960, killing the pilot upon impact. Occupying a rear passenger seat in the helicopter, CDR Thornton managed to free himself from the wreckage and, although his flight clothing was saturated with gasoline and his shoulder badly injured, re-entered the helicopter with another passenger to remove the helpless co-pilot to safety. Moments later, the aircraft was consumed by intense fire. By his instinctive leadership, cool courage, and selfless efforts in risking his own life to save that of another, he upheld the highest traditions of the U. S. naval service.

(*Continued from page 37*)

to Okinawa to be out of the protection perimeter of Japan and too far away from their base to turn back; then they struck. The suicide fleet was destroyed.

Meanwhile, Navymen developed techniques whereby they could overcome the kamikazes, and carrier strikes had destroyed many kamikaze bases.

Carrier Strikes Against Japan

The Doolittle raid on Tokyo, launched by Admiral Halsey's flattops 650 miles from Japan in the early days of the war in the Pacific, gave the enemy a small taste of things to come from U. S. aircraft carriers.

The fast carrier task force developed later in the war was, according to one naval historian, "unrivalled in all history for speed, mobility, endurance and sheer smashing power."

The first such force—11 carriers assembled in four groups, each with its own screen of battleships, cruisers and destroyers—was assembled in the fall of 1943 to prepare the way for the Gilbert Islands invasion.

In February 1944, planes from the carriers of the Truk Striking Force hit "Impregnable Truk," the enemy naval base sometimes dubbed The Gibraltar of the Pacific or the Japanese Pearl Harbor. When the striking force had finished its two-day pounding of that base, Impregnable Truk was impregnable no more.

The "Marianas Turkey Shoot" of 19 Jun 1944 was also the work of a fast carrier task force (TF 58). In just one day, in this action during the Battle of the Philippine Sea, planes from the force destroyed 366 enemy planes in the air and 17 more on the ground, while antiaircraft fire from ships of the force downed another 19—for a total of 402.

In the spring of 1945, with the United States closing in on the enemy, carrier raids were launched against airfields on the Japanese island of Kyushu which had been used as take-off points for the kamikazes. The carrier-based planes also struck at all enemy ships they spotted in the Inland Sea. So many Japanese planes and warships were destroyed or damaged during these attacks that the Japanese counterattack on Okinawa was delayed for several days.

In July and August 1945 Task Force 38, supported by replenishment and antisubmarine groups, raked military targets in the Japanese homeland from Kyushu to Hokkaido, in a series of strikes on airfields, war and merchant shipping, naval bases and military installations.

In this final carrier action of the war, carrier aircraft destroyed 1223 enemy planes—over 1000 of them on the ground—and sank 23 war and 48 merchant ships, totaling 285,000 tons.

Korea: Inchon Landing

The interval between the Japanese surrender on the deck of *Mighty Mo* and the North Korean invasion of the Republic of Korea was brief.

Navymen who had unpacked their seabags repacked them. Those who hadn't unpacked slung them over their shoulders and were off again for points east.

One of the first operations to reverse the tide in Korea was the capture of Inchon—the product of Navy-Marine Corps-Army teamwork and a smooth amphibious landing against a number of natural obstacles.

The landing, which was an excellent example of the way seapower can influence land warfare, took place less than three months after the communists had invaded South Korea. In those first few months the North Koreans had taken all of the Korean peninsula except the Pusan Perimeter, a semicircular area of UN resistance centered around the last remaining major port in South Korea. At one point the reds were within about 30 miles of that port, and the picture did not appear bright.

However, the picture was reversed on 15 Sep 1950, when the Navy landed the First Marine Division at Inchon—not far below the 38th Parallel where the invasion of South Korea had begun.

The approach to Inchon was guarded by two small islands. Attacks from the air softened up the defense of the first. It took only slightly more than an hour for the island to be secured.

The second island was to be reached over a causeway which connected it with the island just occupied by the Americans. The situation was such that one enemy with a machine gun could stand off any number of attackers. This obstacle was removed by naval gunfire. While the North Korean defenders were taking cover, Marines crossed the causeway and the island was captured.

Downtown Inchon was the only place where heavy equipment could be landed. All the other approaches to the city were complicated with tides, mud and seawall.

Carrier-based planes pounded enemy troops dug in on a hill which was the location of Inchon's largest cemetery. They also demolished parts of the seawall.

The harbor facilities at Inchon were taken in an almost intact condition. Within 24 hours after the landing operations began, the landing phase was complete and a command post was set up in Inchon.

The cost of the landing operation to the United States was 21 killed and 186 wounded, yet it was a major factor in driving the communist invaders out of South Korea, in a limited war which was to drag on for interminable months. (See Special Supplement, P.59.)

Korea: Navy in Limited War

The naval gunfire support for the landing at Inchon was the first major bombardment the Navy executed during the Korean conflict, but it was only one of a number of actions in which the Navy contributed to the writing of history during the Korean struggle.

Early in the conflict President Truman ordered the Navy to blockade the coast of Korea. The Navy responded immediately by taking up blockade positions and denying the communists use of the seas.

While maintaining the blockade, the Navy also used its guns to bombard surface military targets and its carrier-based planes to attack enemy troops, supplies and major lines of communication and transportation.

By July 1953, four battleships, eight cruisers and about 80 destroyers were involved in the Korean action and had fired over four million rounds of projectiles.

No less than 13 United States aircraft carriers were in operation at one time or another in Korean waters, and Navy and Marine Corps aircraft flew more than 276,000 sorties.

From sweeping mines to transporting troops and supplies over the long dreary sea miles to Korea, the Navy was on the job then as it was before, has been since and will be in the future.

In this summary it has only been possible to touch some of the highlights of significant naval actions of this century. For a more complete account of these and other vital actions, check the numerous books on the subject which should be available in your ship or station library.

— Robert Neil.

ALL HANDS SPECIAL SUPPLEMENT

The NAVY in the KOREAN CONFLICT

The Potsdam Conference of July 1945 set the 38th Parallel as the line dividing Soviet and American occupation zones in Korea. Subsequent attempts by the Korean people to unite their country were thwarted by organized socialist and communist opposition.

On 1 May 1948, the communists formed the People's Republic of Korea, an organization which was not recognized by the United States.

The possibility of union gone, the South Koreans formed the Republic of Korea which was formally proclaimed on 15 Aug 1948.

Both United States and Soviet troops were withdrawn from Korea, the Soviet troops leaving several months after the formation of the North Korean government.

An uneasy peace prevailed in Korea until 25 Jun 1950 when the well-equipped army the Soviets had left behind crossed the 38th Parallel.

June was an ideal time for an attack on the Republic of Korea. Its armies would be surprised and the typhoon season, which was just beginning, could be relied upon to keep any opposition encountered south of the 38th Parallel off balance.

The North Korean planners had expected only minimum resistance from the ill-equipped Republic of Korea forces. However, when word reached the United Nations that the peace had been broken, an emergency session of the Security Council was called.

Because the Soviet delegation boycotted the UN session, there was no time-killing veto cast against the Council's resolution and the North Korean action was condemned as a breach of world peace.

The Security Council ordered military sanctions and the United States received the responsibility for the direction of military operations against North Korea.

Two days after the first North Korean soldier crossed the 38th Parallel, President Truman ordered the U. S. Seventh Fleet to neutralize Formosa and to operate under General Douglas MacArthur's orders in attacks on military targets in both South and North Korea.

To get ground troops to Korea as quickly as possible, General MacArthur was ordered to strip Japan of its occupation troops and transport them to Korea.

Most of the men were transferred from Japan to Korea by air and by Navy LSTs while planes from uss *Valley Forge* (CV45) and hms *Triumph* flew interdiction and close air support strikes over Korea.

It soon became apparent that, if the United Nations forces were to remain in Korea, reinforcements would have to be brought in, and quickly.

Therefore, General MacArthur requested a Marine regimental combat team and a comparable air unit to furnish tactical support. By this time, other nations began to reinforce United Nations strength in Korea with personnel or supplies or both.

A new carrier task group began to assemble in Hawaii and included the heavy carrier uss *Philippine Sea* (CV 47), the cruisers *Toledo* (CA 133), *Helena* (CA 75), 10 destroyers, five submarines and four oilers.

General MacArthur needed more men to maintain his hold in Korea so men on active duty were detached from their stateside stations and rushed to the battle zone, their home billets being filled by Reservists.

This is not to say that there were no Reservists sent to Korea—many of them also found themselves on ships or planes bound for the Orient.

At the end of the third week in August, the initial North Korean drive had lost much of its punch and General MacArthur and the Fleet admirals turned their

DESCENDING DESTRUCTION — Zeroed in, a *Skyraider* heads for target. *Rt:* Enemy supply train has had it.

thoughts to the offensive operations of UN forces.

The plan under consideration was an amphibious attack on Inchon. This had been considered earlier but the unfavorable situation on the mainland of Korea did not permit its fulfillment.

General MacArthur was well aware of the mobility he would have through the use of seapower and pointed out that a landing well up the Korean peninsula would sever North Korean supply lines.

Also Inchon, the seaport for the capital city of Seoul, was about the only possible port for a large scale amphibious landing.

Although a landing there would be possible, there were numerous difficulties. The approach to the city was through a long, treacherous channel beset with irregular three- to five-knot currents. In addition to natural obstacles, there was a distinct possibility that the channel might be mined. (As it turned out, this proved not to be a serious obstacle.)

Moreover, the entrance to the harbor was commanded by two island forts which would have to be taken before landing forces could penetrate the harbor area.

This meant that reserve ships would have to stand off 30 miles from the assault vessels—about three times the usual distance.

To complicate matters further, the tide at Inchon averaged 29 feet to 36 feet above the low-water mark. This is one of the largest variations in the world.

However, the difficult tide proved to be the instrument that carried the assault forces over the mud surrounding Inchon.

The assault was set to begin 15 Sep 1950 and last for three days—the length of time the water would be deep enough for proper maneuvering. If the assault failed to get underway during those three days, the plan would have to be abandoned until the middle of October at the earliest—too close to winter.

The plan was placed under the direction of VADM A. D. Struble, Commander of Joint Task Force Seven. Task Force 90, commanded by RADM James H. Doyle, was the attack force.

Escort carriers were to fly close support missions while the covering force of cruisers and destroyers was to supply artillery assistance.

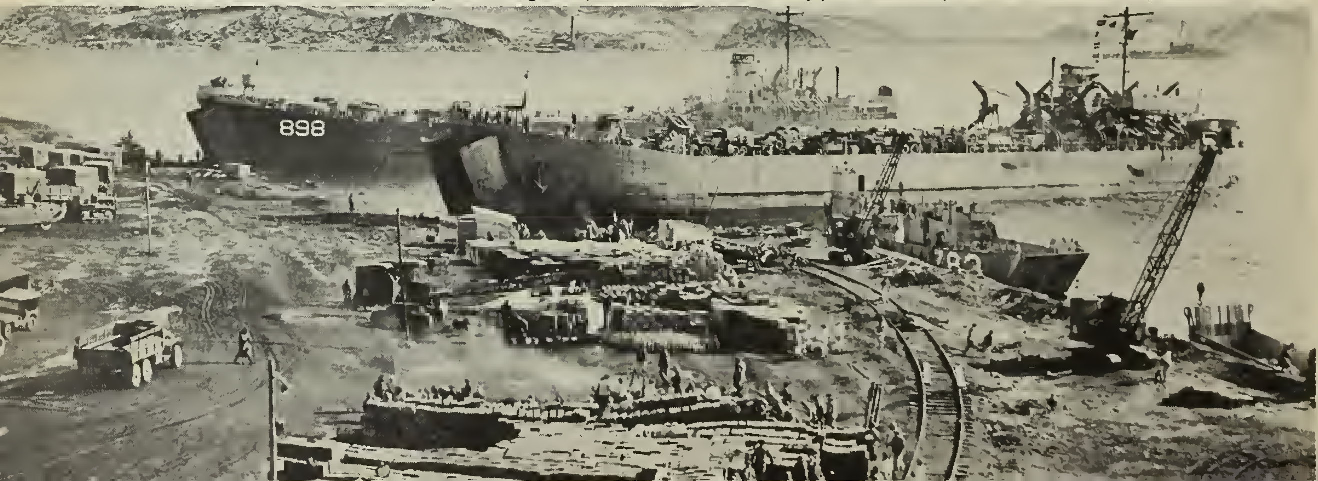
USS *Philippine Sea*, *Valley Forge* and *Boxer* (CV 21) provided deep support air strikes. Logistics were under the Commander of Task Force 79.

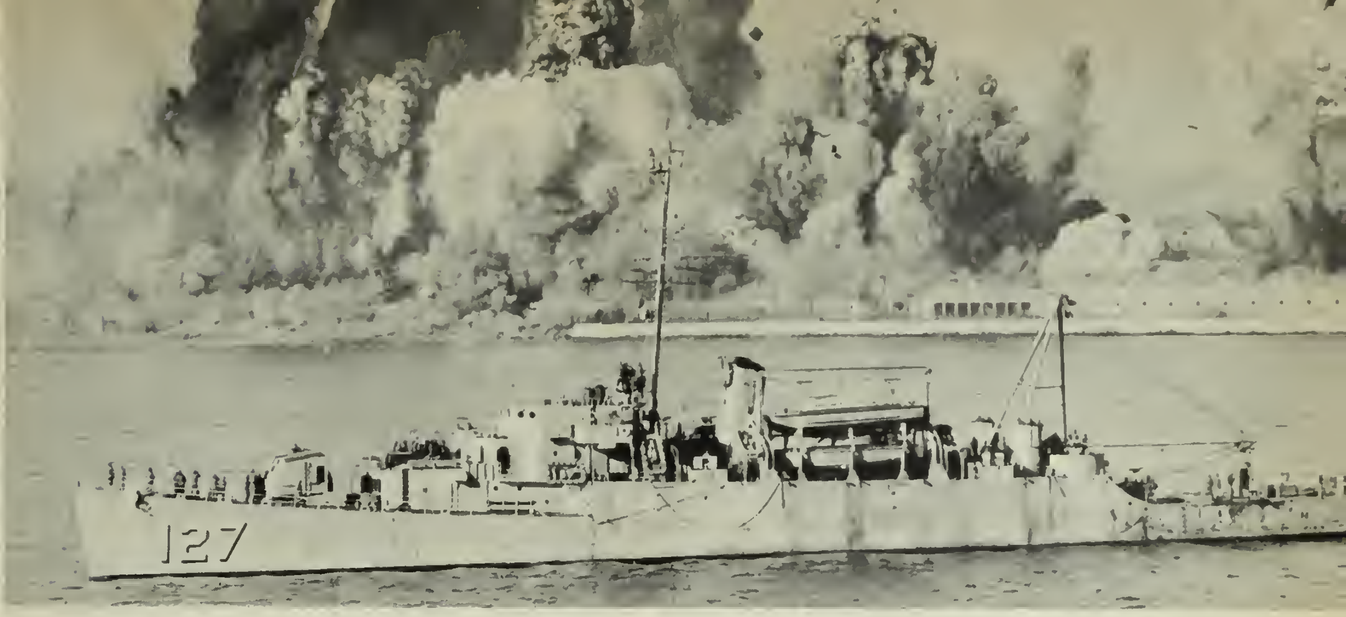
Navy planes flew recon missions and Naval Intelligence secured information on the feasibility of landing at Inchon.

Everything was going well despite the necessarily hasty planning when a typhoon blew up a storm, quickly followed by a second.

The second storm wasn't as bad as it might have been, for it veered off its predicted course and permitted the

HUNGNAM EVACUATION — Navy landing ships take aboard supplies and personnel at Hungnam's harbor.





HUNGNAM GOES UP — A Navy demolition team did a good job here in rendering useless the harbor facilities.

Transport and Advance Attack Groups to get underway from Kobe a day ahead of schedule. The extra day was badly needed because rough weather slowed the crossing to Korea considerably.

Heavy pounding from carrier based planes and heavy gunfire from cruisers and destroyers made it comparatively easy for the amphibious forces to take the first harbor island, Wolmi-do.

The fall of the island was measured in minutes (about 60) from the time the men were loaded into the landing boats until the island was pronounced secure.

The second island (Sowolmi-do) guarding the harbor was connected to the first by means of a long causeway which could be defended by as little as a single machinegun at the end.

When gunfire from one of the support ships forced the communist defenders of the causeway to abandon their positions and take cover, the Marines crossed the causeway and took the island.

The only place heavy equipment could be landed was in downtown Inchon. Two landing "beaches" had been selected. Red Beach, which had a tide so predictable that an invasion time was virtually pre-announced to the enemy, also had the disadvantage that it wasn't really a beach at all, just a sea wall capable of holding back the highest tide.

Blue Beach, the other landing site was almost an unknown quantity. It was known only that the area was too muddy to support the weight of heavy equipment.

Cruisers and destroyers began bombarding Red Beach and partially demolished the sea wall. The hill behind the beach, the site of Inchon's largest cemetery, was pounded hard because the enemy was dug in there, waiting.

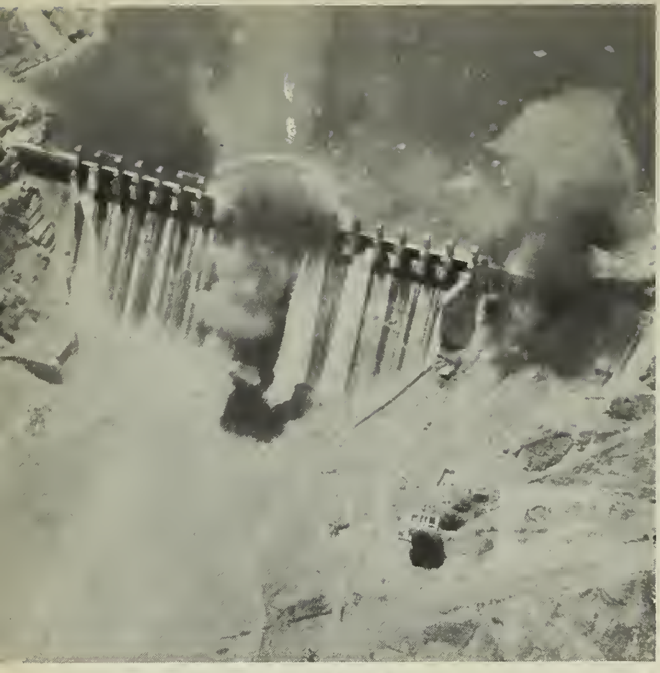
The landing of supplies at Red Beach was difficult because most of the LSTs couldn't lower their ramps because of the rubble created by the ruined sea wall. Bulldozers from two LSTs which succeeded in getting their bows lowered had to be brought in and the rubble cleared away before extensive unloading could begin.

The bulldozers also removed some enemy pillboxes to make the landing easier.

It might be said here that the LSTs landing at Red Beach carried cargoes which included napalm, gasoline and oil. The sides of the LSTs were not capable of protecting a cargo of this type and the men in them were in considerable danger. Through extraordinary luck, not one LST was lost.

At Blue Beach, the Marines seized the rail line to Seoul. The LSTs landed in the morning tide. By this time, however, more LSTs had arrived at Red Beach and the permanent port facilities at Inchon were seized and discovered to be in reasonably good condition, permitting full use after a minimum of repair to them.

DIRECT HIT — A napalm bomb takes two communist minelayers. *Rt:* Red shore artillery snipes at minesweepers.



UNIQUE HIT — Torpedoes open up Hwachon Dam. *Rt:* Armed to the teeth, this plane will give ground support.

The invasion was a first-rate example of teamwork and adaptability under conditions which were far from good. The carrier interdiction strikes had been so effective that even a suicide stand made by North Korean troops at Kimpo airfield did not substantially delay the advance of the Marines.

WITH THE LANDINGS at Inchon, United Nations forces opened an offensive in the area of the Pusan perimeter. These two UN operations put the North Koreans in an untenable situation.

The only practical way the North Koreans could receive supplies was via the Seoul-Taejon road which the Inchon landing had brought under fire. Another alternative was the East Coast road which was under the fire of Allied naval forces. It appeared the North Koreans would have to surrender.

On the diplomatic front, the decision was made to cross the 38th Parallel; the North Korean capital of Pyongyang was captured and two American forces were driving up the peninsula separated from each other by 80 miles of mountainous terrain. The separation of the two forces was so complete that liaison between them could only be handled through Tokyo.

The great imponderable during the entire Korean operation had been the Chinese. The feeling had been that, if they were going to enter the war in any great numbers, they would have done so when it would have been simple to push the United Nations forces out of Korea.

TIME SEEMED to be running out for any Chinese intervention but this was not to be the case.

When United States forces were separated by the mountains, the Chinese crossed the Yalu. Then in great force they commenced to drive the UN forces back to a point south of Seoul.

During the American drive north, the First Marine Division had reached the Chosin reservoir on its way to the Yalu. When the Chinese intervened, the Marines were surrounded by Chinese forces powerful enough to destroy them completely.

Out of this situation, they effected one of the great withdrawals of history. Skillful support from carrier aircraft helped them fight their way through eight Chinese divisions, bringing with them the survivors of three Army battalions which had also been cut off in the reservoir area.

Then began the Hungnam evacuation. It was no rout because it was carried out with a minimum of confusion and loss. Task Force 90 was on hand to evacuate personnel and equipment with 76 transport vessels.

The gunfire support group consisted of two heavy cruisers, eight destroyers and three LSMRs. The "Mighty Mo" was also on hand and used her guns to support the gunfire group. Close support strikes were flown from escort carriers and a light carrier.

THE FIRST PHASE of the operation was the evacuation of the Third Infantry Division at Wonsan. This opera-

ON THE OFFENSIVE — LSTs, LCVPs and amtracs played a vital role during Inchon landing.

tion was complicated by thousands of Koreans who were in the waterfront area seeking to escape the advance of the communist forces.

Most of the refugees were taken off the beach, but after the last ship sailed, thousands still remained.

The evacuation at Hungnam lasted for two weeks. Naval gunfire and carrier strikes kept the Reds back while the transports loaded men, equipment and refugees.

Altogether, during that two-week period, Task Force 90 evacuated about 100,000 troops, 90,000 refugees, 17,500 vehicles and 350,000 tons of bulk cargo.

Throughout the Korean action, UN naval forces repeatedly bombarded coastal roads, forcing the communists to rely on inland roads, trails and railroads. These, the carrier-based planes interdicted.

WITH THE DIPLOMATIC DECISION that Manchurian territory was not to be violated, Chinese planes could break contact with UN fighters and cross the Yalu River into immunity.

There was also the question of the bridges across the Yalu. To leave them for the Chinese to cross without hindrance would be disastrous, yet there was Manchurian territorial integrity to be considered.

The decision that half of each bridge was Korean, and therefore an acceptable target, was some help—but it would still be difficult to destroy just half a bridge. There were seven of them across the Yalu—all ruggedly built.

A bridge is a difficult target to hit, much less destroy. A mere hole through the structure could be quickly patched. When the complications of partial destruction in the face of strong antiaircraft fire were also placed on the task force pilots, the job was indeed formidable.

However, the planes from *Philippine Sea*, *Leyte* (CV 32) and *Valley Forge* knocked out three of the bridges including the main railroad bridge at Manpojin.

Another dramatic operation involving carrier planes occurred after the decision to destroy the Hwachon Dam on the Yalu in order to flood the valley below and knock out Manchurian hydroelectric plants.

After several unsuccessful strikes using bombs, even the largest of which couldn't penetrate the concrete of the dam, the problem was solved by using torpedoes which the planes dropped in the lake above the dam, aiming at the floodgates.

A single strike succeeded in blowing out the gates and flooding the valley below.

AFTER THE UN FORCES made their stand south of Seoul, stopping the Chinese advance, a slow return was made northward again. But by this time the conflict had more or less reached a stalemate.

In June 1951, the Soviet Union had proposed that armistice talks might be profitable and they were begun at Panmunjon with VADM C. Turner Joy, the chief delegate for the United Nations forces. He was pitted against tough opposition in the form of Nam-Il for the Reds.

The talks continued for more than two years but skillful diplomacy and a rigid insistence on United Nations rights brought about a line of demarcation roughly based on the battle zone which existed at the time of the truce. This was a victory over the Chinese point of view that it would be the 38th Parallel.

A considerable difference of opinion regarding the return of prisoners also caused a long delay but agreement was eventually reached and an armistice was signed on 27 Jul 1953. For a comprehensive report on the peace negotiations involved in the Korean conflict, see the book supplement in the February 1960 issue of ALL HANDS (page 34). That issue also contains a discussion of sea power in the cold war era.

AFTERMATH — All's quiet on deck as a lone sailor, standing amidst scattered brass, observes enemy coastline.

TAFFRAIL TALK

DON'T SAY that we didn't warn you.

You may recall that in last month's Taffrail Talk we dealt at considerable length with the annual Navy Bean Soup Contest. We speculated, darkly, that nothing good could possibly come from the flood of entries reportedly being submitted by interlopers and outlanders of various types (Army, Air Force, Civil Service, etc.).

Well, it's happened, just as we feared—and what a fine kettle of beans it is. A Marine, yet, has bowled over all opposition to cop the title of champion Navy Bean Soup concocter of 1962.

Second Lieutenant Vernon J. Perz, USMC, is the Marine. He serves as commissary officer for the amphibious assault ship USS *Princeton* (LPH 5)—and perpetrated his current coup, we hear, by impressing the judging panel with something called LPH-5 Soup.

ALL HANDS does not bestow its recommendations lightly, however, so printing of the winning recipe, plus directions for cooking of same, will have to wait for a future issue. Meanwhile, we shall be conducting exhaustive tests. Pass the salt.

★ ★ ★

On second thought, belay that order for the salt. A character fairly dripping with more than his share of that commodity has just this moment ricocheted through our front door—seabag and all.

We refer, of course, to the inimitable Tom (Pat) Patrick, back for another try at convincing the Navy that the ALL HANDS Art Department can't do without him.

Pat last lost that argument in 1959, when an unsympathetic Shorvey packed him off to Olongapo, P. I. Since then he's found time to put on the hat (he's now Chief Damage Controlman Patrick) and log considerable sea time aboard the aircraft carrier *Ticonderoga* (CVA 14).

The arrival of Pat, complete with his trusty palette, also signalled a departure from our midst. Draftsman Third Class Dave Schluenz, who's spent the past year hunching his lengthy frame over one of our drawing boards, mushes off in mid-month, bundled to the eyeballs, for new duties at the U. S. Naval Station, Adak, Alaska.

★ ★ ★

With the possible exception of such items as cake cuttings and visits to Basra, highline transfers at sea just about rate as the occurrences most oft-reported to this magazine. Now comes news of yet another, carried out between the Atlantic Fleet's USS *Charles P. Cecil* (DDR 835) and *Stickell* (DDR 888).

Operating in seas so rough a boat transfer was out of the question, *Cecil* highlined 80 sailors and 13 loads of baggage to *Stickell* in just one hour and 40 minutes. They'd like to know if anyone's done better recently.

★ ★ ★

A cheery Yule note: Navymen at sea in Atlantic Fleet ships may still be able to decorate a tree this Christmas season. Seven hundred Christmas trees have been ordered for the operating fleet, courtesy of Commander Service Force, U.S. Atlantic Fleet, and the Chief of Naval Personnel.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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The Bureau should be kept informed of changes in the number of copies required.

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PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. The rate for ALL HANDS is 25 cents per copy; subscription price $2.50 a year, domestic (including FPO and APO address for overseas mail); $3.50 foreign. Remittances should be made to the Superintendent of Documents. Subscriptions are accepted for one, two or three years.

• AT RIGHT: GREETINGS—Navy dependents, evacuated from the Naval Base at Guantanamo Bay, Cuba, on board *USNS Upshur*, are welcomed on arrival at Pier 12, Norfolk, Va., Naval Station.

eyes on the seas......

U. S. NAVY

on watch
on guard

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